



Energy Efficient Aeration Systems That don't require maintenance



And aren't full of hot air

The Oxygenator System is the most effective aeration system in the marketplace. This unique system combines mixing and aeration in one step, providing it an efficiency that matches or exceeds anything in the industry. Our performance is based on actual field results taken over time in real world conditions and does not go down over time.

The Oxygenator System

- ◆ Starts with a very high aeration efficiency and this efficiency remains high because there is nothing to foul or clog.
- ◆ Can be installed easily and quickly in an existing or new tank, lagoon, pond or collection system
- ◆ Provides mixing and aeration in one step, providing control of the tank/lagoon, etc
- ◆ Operates with nothing inside the tank except pipe - easy & safe access for personnel
- ◆ Provides tight control of DO (dissolved oxygen) levels in the body of water
- ◆ Eliminates H₂S through direct oxidation (does not strip it) – will also oxidize iron and manganese
- ◆ Adds no heat to the water, allowing for higher sustained efficiency

Submerged aeration systems start to lose efficiency the day they are installed due to fouling. Because they use pressurized air, they add heat to the water and their efficiency drops significantly in warmer weather. Surface aerators provide localized aeration but are inefficient and also require a lot of maintenance.

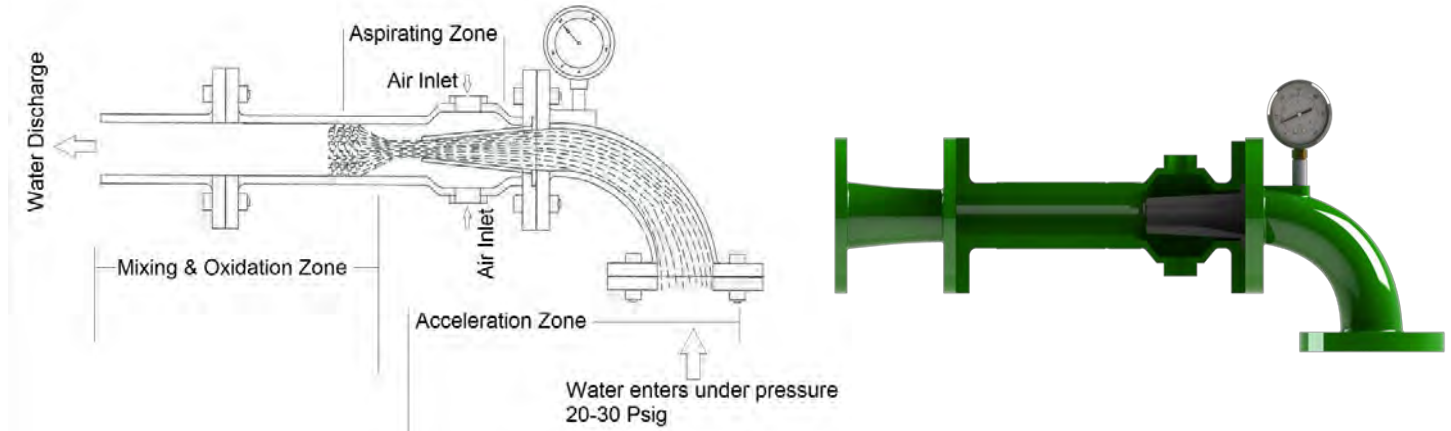


Nothing goes in the water, So neither do you

Simplicity and Sustainability through Innovation



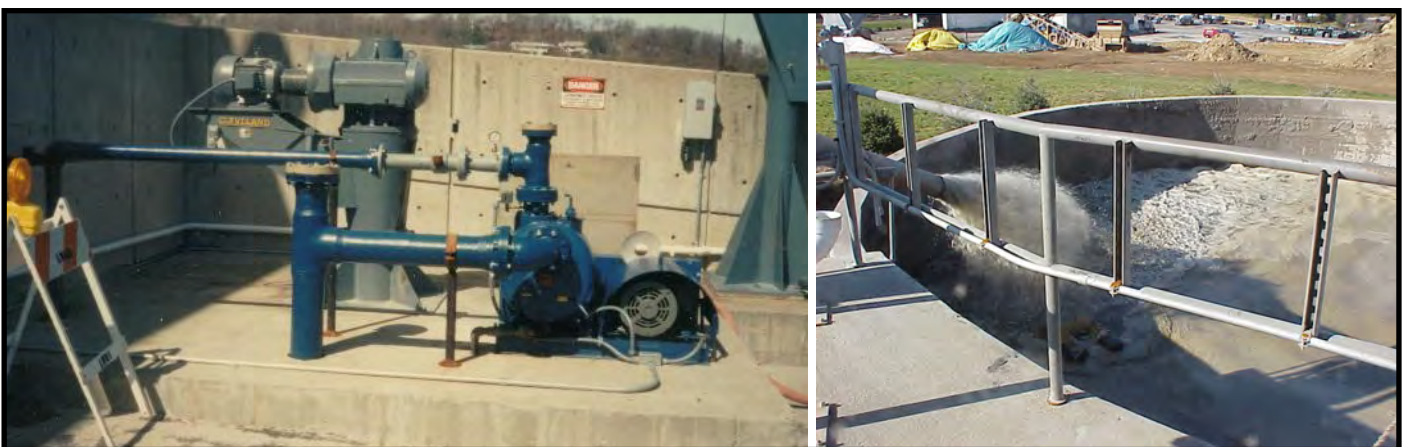
The Oxygenator



How does it work ??

The Oxygenator is a self aspirating aerator specifically designed to induce high dissolved oxygen levels while directly oxidizing sulfides as well as iron and manganese. Water is pumped through the Oxygenator and it draws in 2.2 volumes of air for each volume of water that passes through it. The air is introduced into a very high shear and mixing zone which shears the gas into micron sized bubbles and actually saturates the water with oxygen from that air.

The system consists of a pump, an Oxygenator and some pipe or hose. There is nothing to foul or plug. The Oxygenator works with a wide variety of pump designs and manufacturers. We have been applying this technology for over 40 years with 100% record of success.



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Oxygenator Systems

Simple to Install; Simple to Operate



The Oxygenator offers a lot of advantages in the area of performance while requiring little attention from the operational staff. Installation and application of the technology is quick, easy and inexpensive. The Oxygenator system represents the lowest installed cost and the lowest operating cost in the industry.

The Oxygenator system can easily be added to a tank, lagoon, pond, lift station, gravity sewer, etc without interruption to the existing operations. Installation is simple and inexpensive and typically consists of short runs of pipe between the body of water and the Oxygenator system. Nothing except pipe typically goes into the water.



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Applications



Eliminating H₂S in a lift station & Main



Aerating a wastewater lagoon - replacing surface aerators



Aeration and DAF for poultry

The Oxygenator has limitless possibilities and a nearly limitless number of possible applications. It is an aeration as well as a stripping and oxidation technology that can be applied to any type of water and most sludges. The system is easy to apply, easy to install and easy on the budget. Systems are available for pilot testing as well as for long and short term leases.

Some of the applications in which we have successfully employed this technology are:

- ◆ Emergency Aeration for any body of water
- ◆ Aeration for ponds and lagoons
- ◆ Effluent aeration to raise DO
- ◆ H₂S elimination in collection systems
- ◆ H₂S elimination in tanks, lift stations, headworks, etc
- ◆ H₂S and BOD reduction in septage facilities
- ◆ **Stripping of gases and VOC's**
- ◆ Aeration of Septage & H₂S Elimination
- ◆ Supplemental aeration for treatment plants
- ◆ Post aeration
- ◆ BOD/COD reduction for industrial effluent
- ◆ Leachate pretreatment
- ◆ Mixing and equalization
- ◆ Lake de-stratification
- ◆ **Elimination of Algae in ponds, lakes, rivers...**
- ◆ Aeration & Mixing of Sludge



O₂ Injection—Replaces 1000 hp and hundreds of diffusers with 150 hp and two packages



Aeration Septage—Eliminating H₂S & reducing BOD



Aeration tank—Replacing diffusers

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