

The Oxygenator—One device, many uses



The Oxygenator is self- aspirating aeration and mixing device. Water is pumped through the nozzle which has a concentric reducer. Increased velocity creates a powerful vacuum which draw air into the nozzle at a ratio of 2.2 to 1 (air to water).

As the air is drawn through the nozzle, the water passing through is subjected to a high shear and mixing zone. This steps leads to rapid oxidation of any oxygen deficient compounds in the water like sulfides and iron as well as the separation of any partially dissolved(volatile) compounds and gases,

Thus, the nozzle acts as an oxidizer, an air stripper and an aerator all at the same time with these three actions not interfering with each other. The fact that water is being pumped through the nozzle and has entrained but not-dissolved gases like nitrogen mixed in creates power mixing to the water body

The Oxygenator is a specially designed venturi or eductor. It shares the mechanical attributes of this well known technology but has some key enhancements, allowing it to outperform everything else in the market

The Oxygenator nozzle requires 25-30 psig of pressure and a preselected flow rate in order to perform this magic. Water exiting the device has up to 6 psig of residual pressure which can be used to get the water to where its going or to afford better hydraulic control of a body of water.

Key Benefits

Simple to install and to operate

Cost effective

Little or no maintenance

Does not foul or clog

Cost effective

