ORTHOS LIQUID SYSTEMS

Poseidon Filtration Systems®

Certified to NSF/ANSI 61

ISO 9001 Registered Quality Management

Zephyr™ Induced Draft or Forced Draft Aerators

Efficient, Economic Oxidation and Dissolved Gas Removal

Key Benefits:

- **Economic way to oxidize iron and remove soluble gases**
- **Aeration is a tried-and-true, proven treatment process**
- **Robust materials of construction**
- **Minimal maintenance required**

Zephyr™ Aerator (Panel Removed)

POSEIDON FILTRATION SYSTEMS®

MADE IN THE USA

Zephyr™ Forced Draft and Induced Draft Aerators provide effective and economical methods to oxidize iron and remove hydrogen sulfide and other dissolved gases from a raw water source, typically groundwater. This is accomplished by flowing air and water counter-currently through appropriately designed packing. Contacting air with small water droplets created for maximum surface area oxidizes iron and removes dissolved gases. Aerators are built for longevity, featuring aluminum or stainless-steel vessels, few moving parts, and minimal maintenance requirements.

How it Works —Induced Draft Aerator

A suction fan mounted on top of the aerator vessel draws air through the intake screen located near the bottom of the aerator, up through the packing (slats), moisture eliminator, fan assembly, and ultimately exhausts through the protective cap. This is done while water enters near the top of the aerator via an inlet pipe, is evenly dispersed across the cross-sectional area, and cascades down through the slats as small droplets into a detention tank from which it is pumped or overflows into (typically) granular media filters.

How it Works — Forced Draft Aerator

Forced draft aeration follows the same air and water flow paths through the aerator as with the Induced Draft Aerator. The difference is the blower is mounted at the bottom of the aerator vessel and pushes screened air into the unit, up through the slats, moisture eliminator, and is ultimately exhausted through the screened protective cap. This is done while water enters near the top of the aerator, is dispersed across the cross-sectional area, and cascades down through the slats as small droplets into the detention tank.

Engineering Support

As with all of our products, ORTHOS can help design a Zephyr™ aerator including type, materials of construction, vessel size, packing type, and air flow rate.

Please contact your local representative for more details.

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