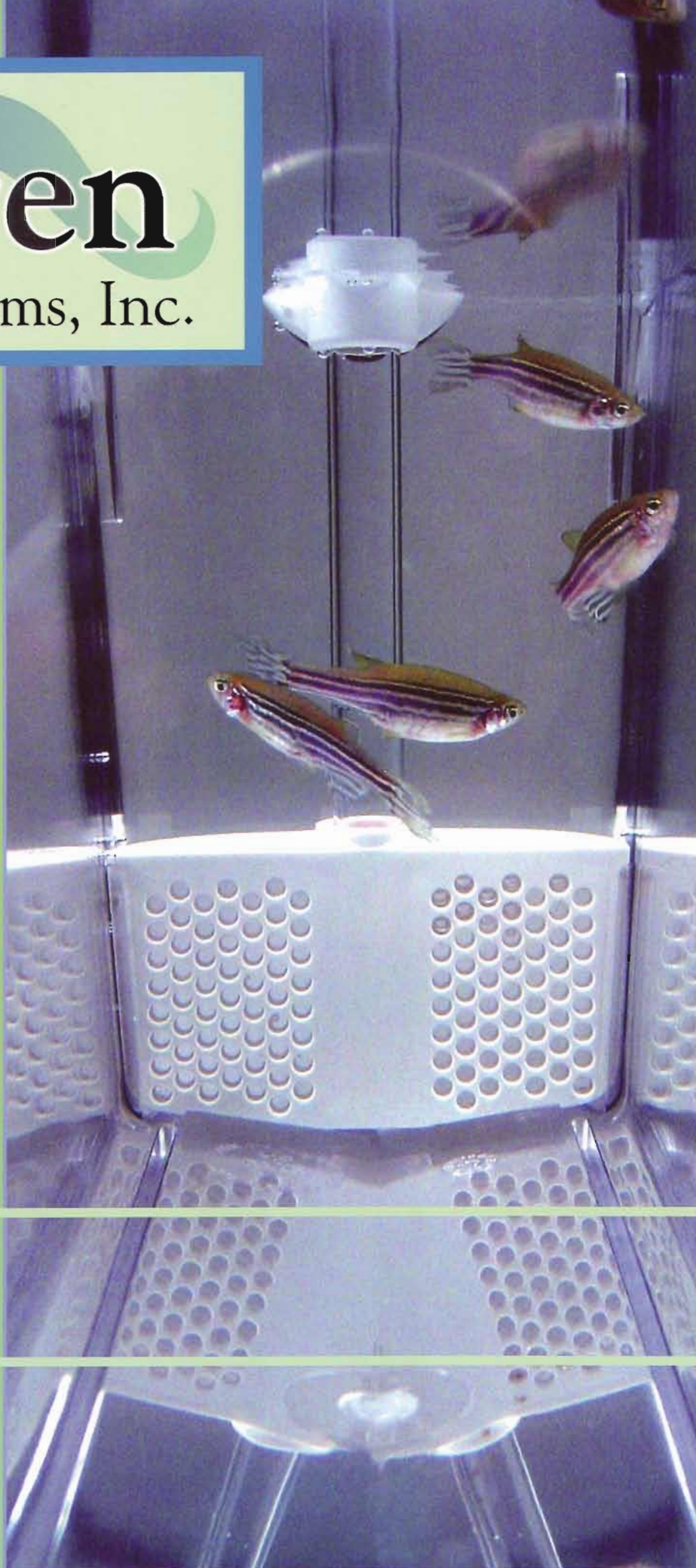


Thoren

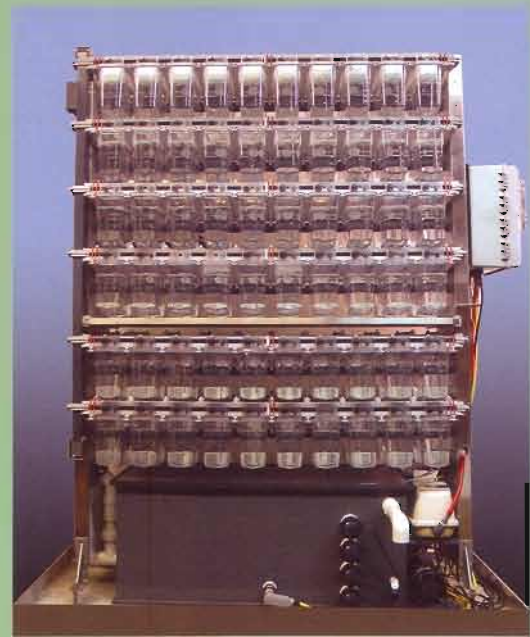
Aquatic Systems, Inc.



Thoren Aquatics goal is to provide stable high quality, high density, low maintenance fish accommodations without the swamp-like environment. As genetic research has evolved, more attention is now paid to the housing environment so that it does not contaminate long term research.

Two sizes of V-Bottom tanks are available: 3 liter schooling tank and a 1 liter combination weaning / single fish tank.

The dual sided 3 liter tank rack ranges up to 7 rows high x 14 wide (196 tanks). Floor drains are required for 7 row racks. The dual sided 1 liter tank rack ranges up to 9 rows high x 14 wide (252 tanks).



Rack Design

- State-of-the-art open construction rack design maximizes tank density while allowing excellent light penetration through the rack.
- Modular approach facilitates lab layout by providing easy configuration of racks having various heights and widths.
- Constructed with type 316 stainless steel with modular plastic components, permitting easy sanitization.
- Parts clamp together and can be dis-assembled for cleaning or moving.
- Grey plastic drains and drain tubes reduce algae growth.
- All water contact materials have been tested for aquatic compatibility.
- Adjustable legs provide leveling to compensate for uneven floors.
- Large bi-directional pull-out shelf provides convenient work area for each side of the rack.



Tank Design

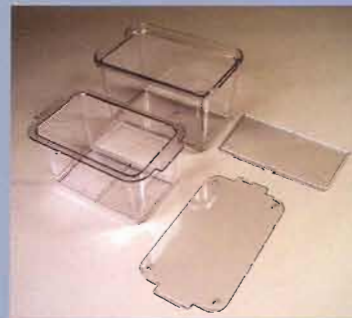
- Tanks are easily removable without disconnecting or moving hoses, or turning off air or water.
- Fine adjustment water valves allow flow rate to be adjusted from 0 to 8 GPM @ 5 PSI for each tank.
- The most efficient self cleaning tank in the industry! The V-Bottom tilted tank design gathers waste to the middle and drain end of the tank, where it is removed by the recirculating water, reducing the need of manual tank cleaning.
- This design operates at a lower flow rate than the flat bottom tanks, reducing operating cost or allowing more racks to be run off a central water system.
- Contamination resistant lid design. Water spilled from above onto lid will run off the edge, not into the tank.
- Lids are locked in place by the plastic bracket as they are placed in the rack, no chance for fish escaping.



3 Liter Schooling Tank and 1 Liter Tank



1 Liter Combination Weaning and Single Fish Tanks



Thoren Crossing Tank with screen insert and divider

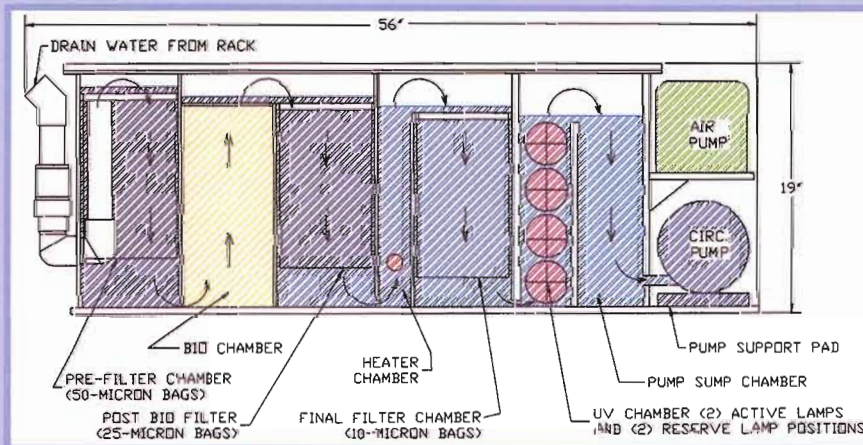
Water Filtration System

Manufactured by Emperor Aquatics specifically for Thoren Aquatics

Designed to fit under a 10 wide fish rack, this high quality water filtration system can supply one or two 120 tank fish racks.

The system includes:

- **Pre-filter** - water from each rack flows through parallel bag filters and into the bio-chamber.
- **Bio-filters** - venturi air enriched water keeps the bio-media moving to provide very efficient chemical filtration. Over 100% of the water is chemically filtered before it is returned to the tanks.
- **Middle-filter** - parallel bag filters remove mid-sized particles.
- **1000 watt Heater** - maintains temperature of water
- **Final-filter** - parallel bag filters remove mid-sized particles.
- **Dual High Output 50 Watt UV-sterilizer**
- **Circulating Pump** - energy efficient, magnetic drive
- **Air Pump** - linear piston type, quiet, energy efficient, maintenance free.
- **Automatic Fill Valve** - keeps water at proper operating level .
- **Low Water/Low Flow Sensor** - shuts off circulating pump and heater and sounds an alarm.
- **Overflow** - safely dumps water into drain during high water condition or for changeout.
- **Blocked Filter** - sensor sounds alarm when any of the parallel filter pairs block, overflow bypass provided to allow continued operation.
- **Touch Pad Readout with Digital Controller (optional)** - reads temperature, conductivity, PH, ORP, and % of full UV output.



Thoren
Aquatic Systems, Inc.

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