

### **Fish System Specifications**

Multi-rack Fish System: Powdercoated Aluminum Racks: 55"L x 17.5"W x 92"H (set of 2)

Powdercoated Aluminum Racks: 46"L x 17.5"W x 92"H

Each rack:

- should come complete with manifolds, valves, sump with built-in biofilters, gutters, downspouts stainless rinse and reuse prefilters and all associated plumbing connection.
- should be fully welded type 6063 structural aluminum with barrier coating.
- should be able to hold up to sixty (60) 4-liter tanks, thirty (30) 8-liter tanks ninety (90) 2-liter tanks or a combination of each.
- should allow the user to be able to change the tank locations at any time without rack modifications.
- Should have integrated leveling feet.
- Should provide precision flow control valves to each tank.
- Should have high quality true-union ball valves at each shelf for easy flow control for the whole rack.
- Should not allow for any tanks to sit outside the rack foot-print, insuring no accidental tank dislocation.
- Should come with a main valve that can be used to turn off flow to the rack without affecting the rest of the system.

Tanks: 2L Polycarbonate Tanks with Lids and Baffles (Qty. 940)

4L Polycarbonate Tanks with Lids and Baffles (Qty. 630)

Each tank:

- Should fit on any shelf on any rack in the system.
- Should provide a maximum self-cleaning effect through gravity and hydraulic action.
- Have baffles that promote self-cleaning and prevent clogs and overflows.
- Should be able to be easily removed while maintaining flow rates.

Life Support Systems:

- Should allow for a minimum of 6 complete cycles of water per hour.
- Should be quiet and mitigate the occurrence of gas bubble disease.
- Should have filters that remove waste down to 40 microns, as well as be self-cleaning.
- Should possess high-efficiency water pumps and a UV sterilizer (>120,000 uWatts/sec/CM<sup>2</sup> kill rate at end of lamp life)
- Should have a automatic water change system and heater.
- Should include 4-stage filtration.

#### Monitoring & Controlling:

- Should have continuous monitoring of critical water chemistry parameters.
- Should be able to automatically control pH, conductivity and temperature.
- Should provide instant notification of potential water chemistry problems.
- Should have visual and audible alarms and alerts on controller.
- Should have a wi-fi connected monitoring system, with touchscreen tablet pH probe, conductivity probe, temperature probe, level sensor and two dosing pumps.
- Should provide 2 stock solution tanks and water test kit.