Integrated-Aqua™ Filtration Systems

- **Plug & Play Design** - Systems are modular, skid-mounted and pre-tested systems that are easily installed with only minor plumbing and electrical connections.

- **3D CAD Design Included** - Systems are designed and built to order, including a 3D CAD drawing to insure compatibility with existing site plans.

- **Tested & Documented Prior to Shipment** - Strict testing guidelines that include water testing, electrical testing and documentation prior to shipment insure that every system operates to its design specification. System specific User’s Manual included. 3rd Party certification by CSA, MET, UL available.

- **PERMA-BEAD™ Media** - Is a permanent, non-channeling, non-clogging filtration media solution used in organically loaded systems.

- **Wide Ranging Options** - Systems are available with a wide range of equipment, control and monitoring options.

**Available Options**

- Auto Backwash
- Air Assist Backwash
- Accessories
- VFD
- Bag Filters
- UV Sterilizers

**APPLICATIONS:**

- **Display Ponds & Water Features** - Koi ponds and water gardens, landscape water features. Ideal for commercial and residential projects.

- **Public Aquariums & Zoos** - Fish displays, exhibits, quarantine systems, holding tanks.

- **Aquaculture** - Commercial and research applications including incoming water filtration, recirculation systems, fish holding and breeding systems.

- **Commercial & Industrial** - Water recycling, process treatment, cooling tower filtration and effluent treatment.
Integrated-Aqua™ Filtration Systems

STANDARD SYSTEMS
Standard filtration systems are available with flow rate capacities of up to 240 gpm. Systems come standard with pump, UV sterilizer and Perma-Bead™ media filter pre-wired, pre-plumbed and skid-mounted. All systems are designed and built to meet your specific needs.

CUSTOM SYSTEMS
Custom systems may be designed and built to order. Larger filtration systems are available to handle flow capacities of up to 1200 gpm. Tandem piping kits and series automatic backwash systems available for multiple filters. Please call for sizing and design assistance.

<table>
<thead>
<tr>
<th>Model</th>
<th>Filter Diameter</th>
<th>Design Flow Rate 12.5 - 18 gpm / ft²</th>
<th>Electrical Requirements</th>
<th>In / Out Size (in.)</th>
<th>Media Capacity (lbs.) Sand / Permabeads</th>
<th>Base Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFS-24</td>
<td>24”</td>
<td>39-56</td>
<td>115/230V - 1ph</td>
<td>2”</td>
<td>325 / 195</td>
<td>48” x 48”</td>
</tr>
<tr>
<td>IFS-30</td>
<td>30”</td>
<td>51-88</td>
<td>115/208-230V - 1ph or 3ph</td>
<td>2”</td>
<td>600 / 360</td>
<td>48” x 60”</td>
</tr>
<tr>
<td>IFS-36</td>
<td>36”</td>
<td>88-127</td>
<td>208-230V - 1ph or 3ph</td>
<td>2” / 3”</td>
<td>800 / 480</td>
<td>48” x 60”</td>
</tr>
<tr>
<td>IFS-42</td>
<td>42”</td>
<td>120-173</td>
<td>208-230V - 3ph</td>
<td>3”</td>
<td>1410 / 850</td>
<td>66” x 88”</td>
</tr>
<tr>
<td>IFS-48</td>
<td>48”</td>
<td>157-226</td>
<td>208-230V - 3ph</td>
<td>3” / 4”</td>
<td>2110 / 1266</td>
<td>70” x 90”</td>
</tr>
</tbody>
</table>

*Backwash at 15gpm / ft² per manufacturer’s recommendation.*
Standard & Optional Features

Integrated-Aqua™ Filtration Systems give customers the ultimate flexibility in their design to meet the specific demands of each project. We help customers choose between a wide range of pumps, filters, disinfection devices and automation options. All orders include CAD design drawings prior to fabrication and are pre-programmed and water tested at the factory prior to shipping, simplifying installation on site.

1. **PermaBead™ Media Filter**
   Removes particulate solids for clean and clear water. PermaBead™ Media is a superior granular polyethylene media alternative to sand designed to prevent channeling, clogging and improve backwash performance.

2. **Centralized Electrical Control Panel**
   Pre-engineered electrical panels are designed to meet the needs of each system. Every panel is electrical tested prior to shipping. UL Listing available.

3. **Pumps**
   Models available for any application including saltwater, corrosive or freshwater. Pumps come standard with true-union ball valves and quick-disconnect wiring for easy replacement.

4. **Automatic Backwash Valve & Controls**
   Pressure & Time Activated for zero maintenance. Touch pad on valve controller allows automatic or manual activation. AquaPLC™ Controllers can operate up to 5 systems.

5. **Heavy-Duty Fiberglass, Stainless Steel or HDPE Skid Base**
   Allows systems to be easily moved with a forklift or pallet jack simplifying shipping, installation and relocation.

6. **Variable Frequency Drives for Pumps**
   From 3/4hp and larger allows operators to dial-in the desired flow rate with the touch of a button. VFDs maximize energy efficiency and prolong useful pump life.

7. **Optional Meters, Sensors & Switches**
   Flow meters, flow sensors and switches can be added to systems for additional safety and functionality.

8. **High-Output UV Sterilizers**
   Included for disinfection of filtered water without the use of chemicals. Bypass plumbing allows continuous operation during lamp replacement or UV maintenance. A wide variety of UV equipment and options are available.

CSA, UL Listed Systems Available
Automatic Backwash Systems

STAND-ALONE AUTO BACKWASH VALVE

1. Water and chemical resistant NEMA enclosure and touch key pad.
3. Programmable digital calendar clock timer for timed auto backwash control is integrated into control board. Adjustable delay/duration timers, electrical terminal connections also included.
4. Adjustable pressure switch (6-45psi)
5. Multiport valve connections to filter (1-1/2”, 2” or 3”)
6. Manual backwash override handle
7. Mode indicator dial

AquaPLC™ MULTI SYSTEM AUTO BACKWASH CONTROLLER

Introducing AquaPLC™, our new State-of-the-Art Programmable Logic Controller designed to provide smart backwash handling of multiple media filtration systems from a single user interface.

✦ Multiple System Control - Control up to 5 filtration systems with a single AquaPLC™ or connect additional AquaPLC™ units with a single ethernet wire for ultimate expandability of size project.

✦ User Friendly Touch Screen - Easily schedule filter backwashes for each system with a 24/7 calendar clock timer, initiate manual backwash, turn On/Off pumps, access custom system settings and view all system diagnostics on a single-point Windows touch screen user interface.

✦ Enable / Disable Functionality - Options such as Air-Assist™ backwash, pressure activated backwash, low level sensor status, freshwater backwash and conditional alarms are easily enabled or disabled during setup to fit users’ specific application. AquaPLC™ input/output modules allow ultimate flexibility in your system design.

✦ Local & Remote Access - Access system status, control pumps and handle alarms either locally on the AquaPLC™ touchscreen or remotely via internet from your computer.
Perma-Beads™ Filtration Media

Perma-Beads™ replace sand and prevent clogging in any sand filter. No plumbing changes. Just take out the sand and pour in the Perma-Beads™. Proven in thousands of filters over 20 years. Don’t settle for cheap substitutes, professionals choose Perma-Beads™!

Capture and release of fine suspended solids is easily achieved due to the combined effectiveness of the unique shape, surface properties and density of Perma-Beads™. With a 20 year life span, Perma-Beads™ eliminate labor-intensive sand media replacement while allowing pumps to run cooler, saving money and extending equipment life.

APPLICATIONS

✉ Ornamental Ponds & Water Features - Prevent sand filter clogging and compaction by eliminating bacterial bridging between filter media. Maintain superb water quality while saving water with reduced back washes and save money as pumps run cooler.

✉ Aquaculture, Zoos & Aquariums - Create superb filtration in organically loaded systems due to the combined effects of large interstitial spaces between spherical Perma-Beads™ and their unique surface properties and high density. Consistent product uniformity and the absence of any contaminants make Perma-Beads™ ideal for freshwater or marine systems with delicate fish or invertebrates.

✉ Commercial & Industrial - Save money, water and maintenance time while reducing costly media replacement in water recycling and process treatment in any sand filter system. Call for free system design services and technical support.

Air Assisted Backwash Option

Integrated-Aqua™ Filtration Systems are now available with an Air Assisted Backwash option for either manual and automatic media filter systems up to 36” diameter. The Air-Assist™ option helps to fluidize the bead bed for improved backwash performance and water savings. Air-Assist™ can either be included in new IFS filtration systems or retrofitted into existing bead filtration systems that utilize sinking beads. Perfect for aquaculture systems, recirculating saltwater systems, aquariums and more.

Air-Assist™ Blower Package includes:
- 1 hp or 2 hp blower, PVC plumbing kit, enclosed motor controls with on/off switch and indicator light. Detailed installation instructions included in retrofit packages. Call today for more information.
Complete Custom Systems - Design & Build

Integrated Aqua Systems, Inc. specializes in the design, assembly and fabrication of integrated water filtration and tank systems used to meet our clients' needs in aquaculture, research, aquariums, zoos, ponds and water features. We work with our clients from the design stage through the start up, commissioning and training.

Integrated Aqua Systems' project team includes top biologists, engineers, suppliers and industry partners to make your project successful. We design every custom system in 3D CAD, complete rigorous testing, provide detailed documentation and support installations with on-site start-up and commissioning services. Whether your project requires a single filtration system or complete facility design and build, IAS will provide you with exceptional service, high quality equipment and value. We specialize in the following areas:

👉 Aquatic Research Systems & Wet Lab Facilities - for use in ocean acidification research, hypoxia research, aquaculture studies, fish holding, breeding and more.

👉 Specialized Filtration & Water Handling Systems - for commercial scale ponds, water features, public parks, splash pads, commercial and industrial applications.

👉 Recirculating Aquaculture Systems (RAS) - for research or commercial applications.

👉 Tanks, Racks & Systems - multi-tank systems, support racks, integrated tank and filtration systems used for aquatic animal holding, breeding and display.

Equipment Sales

IAS can supply all of your capital equipment needs. We offer extremely competitive prices and exceptional service.

Shop The IAS Online Store

Hundreds of items you need at the lowest prices available!

integrated-aqua.com/ias-online-store