

INTEGRATED™ Filter Modules

INTEGRATED™ Filter Modules (IFM) Systems are gravity-fed filtration systems with multiple filtration stages in a single unit process. The result is a turnkey system which is extremely efficient, compact, scalable and fully customizable. INTEGRATED™ Filter Modules are integrated into a single tank unit designed for particle removal, biofiltration, aeration, temperature control, pumping, disinfection and automation. Available with a complete list of options to suit any project requirement from 400 gallons up to 20,000 gallons per system.

ADVANTAGES:

Extremely Efficient

Gravity fed system using only low head pumping operation and passive mechanical filtration is extremely energy efficient and quiet.

Compact Footprint

Multi-stage design in a single unit process makes INTEGRATED™ Filter Modules very compact to fit in the tightest spaces.

Turnkey Installation

All necessary equipment and accessories are pre-fabricated and tested for turnkey installation and easy startup.

Scalable & Modular Design

IFMs are fully scalable and modular for ease of integration into a wide range of aquatic life support applications and spaces.

Heavy Duty Non-Corrosive

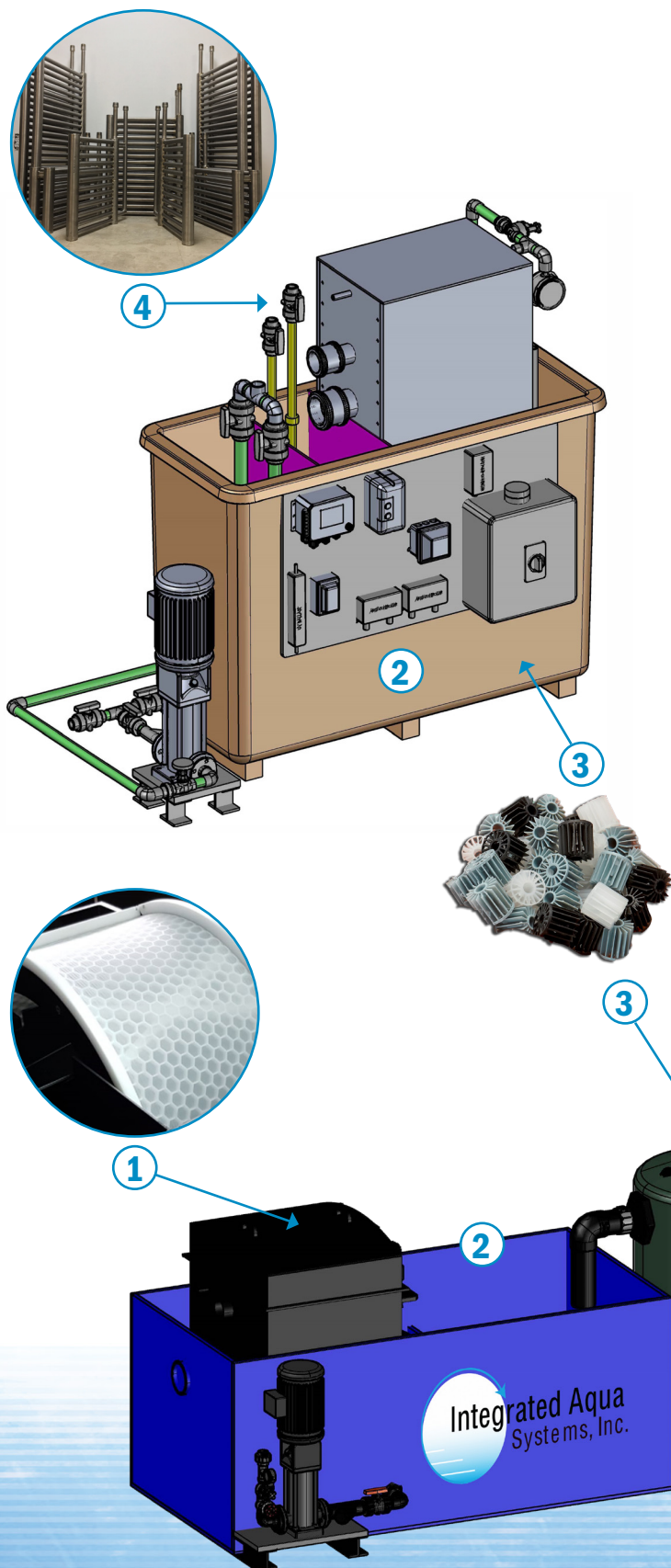
IFMs are constructed from heavy duty welded HDPE material and uses only non-corrosive materials throughout the system to withstand the harshest saltwater and salt air applications.

APPLICATIONS:

- Stand-alone commercial aquarium display systems
- Quarantine holding systems
- Aquaculture rearing and breeding systems
- Aquatic Research systems



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STANDARD & OPTIONAL FEATURES:

- 1 Mechanical Filtration:** Select from gravity fed filters including bag filters for smaller systems and X-series HEX drum filters for larger systems. Filter screens from 10 – 1000 micron.
- 2 IFM Tank Vessels:** Constructed from heavy duty non-corrosive materials including welded HDPE plastic and fiberglass reinforced plastic (FRP). Designed with built-in inlets, internal support.
- 3 BioE Series MBBR Biofilters:** Systems are available with Moving Bed Biofilters (MBBR) built internally or as a stand-alone biofilter. Biofilters are sized to provide the desired water quality conditions and include all components for a working system.
- 4 Temperature Control:** Options include immersion grid coils and electric heaters for space savings and efficiency or externally mounted chillers and heat pumps for systems with larger load capacities.
- 5 Pump Options:** Quiet, low head pumps are used for optimal electrical efficiency and low maintenance operation. Select either submersible pumps for most compact footprint or from a wide range of externally mounted end-suction centrifugal pumps to meet specific project requirements.
- 6 Disinfection:** UV sterilizers are added for disinfection of water borne pathogens and to prevent the spread of diseases.
- 7 Automation, Monitoring & Controls:** A complete range of automation, water quality monitoring and controls are available with INTEGRATED™ Filter Modules. Choose from autobackwash for Drum filters, water quality sensors, makeup water systems and more.

