BioMOD™ DAF

High Efficiency Solids Removal for your Wastewater

Aquatech's BioMOD™ Dissolved Air Flotation units are widely used in a variety of industrial applications to remove solids, oil and grease from wastewater streams. The BioMOD™ DAF series differentiates itself from conventional DAF systems through use of continuous microbubble generation, which allows the system to achieve maximum separation with less equipment and subsequently lower footprint.

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Aquatech

BioMOD™ DAF

Sustainable. Modular. Efficient.

Making the most of your water is key to achieving reduced spending in your facility, but can be overwhelming to address holistically. Luckily, reducing TSS (Total Suspended Solids) and O&G (Oil & Grease) content in your wastewater is a great place to start, and can be achieved with many solids-water separation technologies. Aquatech's BioMOD™ DAF is one such technology, and utilizes self-generating microbubbles to deliver maximum TSS/O&G removal with less equipment and lower footprint than conventional Dissolved Air Flotation systems.

Based on the company's decades of experience in design and operation of water treatment equipment, Aquatech can conduct treatability and pilot studies for challenging applications to accurately determine the best process dynamics and sizing for your specific application. Furthermore, BioMOD™ DAF can also be adapted for nontraditional DAF applications, including (1) substitution of a secondary clarifier in conventional activated sludge and fixed film processes, (2) removing phosphorous using chemical precipitation, and (3) treating acid mine drainage (AMD).

Typical Applications

- Meat and Poultry
- Dairy
- Food and Beverages
- Paper and Pulp
- Pharmaceuticals
- Textile Manufacturing
- Refineries
- Wastewater treatment – Primary O&G and solids separation, clarification in activated sludge processes and fixed film bioreactors
- Acid Mine Drainage (AMD) treatment

BioMOD™ DAF

Operational Benefits

- **Minimized Footprint** for each model enabled by high surface hydraulic loading rate.

- **Modular Design** results in ease of transportation and provide true "Plug and Play" installation, lowering installation and O&M costs.

- **Eliminates Need** for air compressor, inline mixer and dissolution tank by using microbubble generator.

- **Robust** variable speed design scraper provides a long life of chains, sprockets and scraper blades.

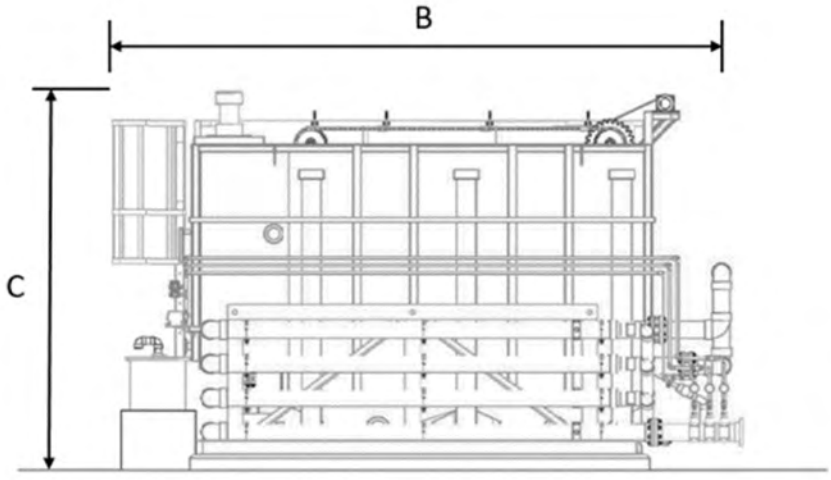
Model	A (Feet)	B (Feet)	C (Feet)
BioMOD™ M05 (50 GPM)	14′	10′	9′-6″
BioMOD™ M10 (100 GPM)	16′	11′-6″	10′
BioMOD™ M15 (150 GPM)	17′	13′	10′-6″
BioMOD™ M20 (200 GPM)	17′	175′-6″	10′-6″
BioMOD™ M30 (300 GPM)	21′	17′	10′-6″
BioMOD™ M40 (400 GPM)	24′	22′	10′-6″

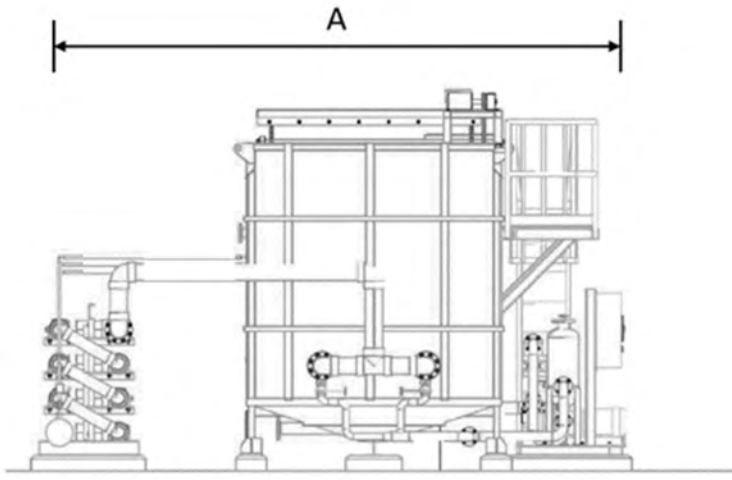
Notes:
1. Dimensions are approximate and may vary slightly.
2. The dimensions in the table above represent the envelope of the DAF system, including the Flotation tank, Recycle pump skid and Coil Flocculator. For dimensions of individual units, contact Aquatech.

- **Optimized** flotation tank level adjustment mechanism provides means to change tank levels as required to promote scum build up and enhance scraper run frequencies chains, sprockets and scraper blades.

- **Achieves Greater Solids Separation** than conventional DAF's due to relatively small size (and zeta potential) of microbubbles in the BioMOD™ DAF.

- **High Quality Product Water** with low BOD, COD, and TSS with a high removal efficiency.





Materials of Construction: Carbon Steel (CS) or Stainless Steel 316 (SS316), with other options available upon request.

BioMOD™ DAF

Optimally Sized for High Flotation Efficiencies

- Internal baffles for the contact zone to ensure intimate contact between the incoming white-water and the process fluid.
- Geared drive motor, chain and sprockets for the surface flight scrapers.
- Level control arrangement.
- PVC scrapers for skimming the scum layer to a collection chamber.
- Screen to lead the clarified water to the outlet chamber.

The BioMOD™ DAF System is Comprised of the Following Key Components