

Add-On Biofilter and Degasser Module



North AquaCulture has developed a compact and space-efficient biofilter and degasser module designed for new land-based aquaculture facilities and as an add-on module for existing land-based aquaculture facilities. The module is scalable with a capacity of 50-300 kg feed per day per filter and can be customized for different types of aquaculture systems (FTS-R and RAS). The construction is made of PE material and designed to minimize maintenance requirements.

The module is prefabricated before delivery on site and is easy to install, with the option of direct integration into existing systems. The compact design makes this a flexible and space-saving solution for facilities with limited building space.

In order to maintain production continuity and achieve a seamless transition, the modules can be installed while the existing facility remains operational. The image below in the lower right corner depicts a facility that was fully operational throughout the installation period.

The module features a fixed bed biofilter section that effectively reduces the TSS levels in the facility, transforming organic matter and ammonium in the process. The degasser section reduces the concentration of Carbon Dioxide and Nitrogen from the process water.

The module can be delivered with a monitoring and control system (SCADA), featuring automatic functions to sustain maintenance routines such as biofilter cleaning and system drainage. This ensures optimal operation, increased safety and efficiency, and grants the operators full control over the water parameters in the facility. The SCADA system can also be integrated with existing monitoring and control systems.

By installing an add-on module on an existing land-based aquaculture facility, it will contribute to reduced turbidity, increased feeding capacity, and reduced operating costs. This presents a particularly good investment for land-based fish farmers with existing facilities seeking to increase their feeding capacity in a simple manner.



8 pcs. Ø3,8m & H6,3m filters (2000 kg feed per day)