

Solutions for Process Automation

Revolutionizing Italian fishery

NaturAlleva and the NFC –
Next Fish Center

NaturAlleva, part of the VRM Group, has implemented its water recirculating system using solutions for Process Automation for optimal operation.



A state-of-the-art system for sustainable aquaculture

The NFC production facility at NaturAlleva represents a significant innovation in the Italian seafood supply chain through the adoption of advanced recirculating aquaculture systems (RAS). These facilities allow freshwater and saltwater fish to be farmed with reduced environmental impact thanks to a state-of-the-art filtration and monitoring system. At the core of the RAS technology is its ability to manage and purify water efficiently, ensuring sustainability and saving water consumption.

RAS technology: a sustainable breakthrough

The RAS at NaturAlleva is an integrated system that uses a three-stage filtration cycle (mechanical, biological, and chemical) to keep water clean and reusable. Fabio Brambilla, fish nutritionist, stresses the importance of continuously monitoring water parameters, made possible thanks to advanced sensors that transmit data in real time to the central system. This level of control not only ensures an optimal environment for fish, but also represents a real innovation in the industry.

The efficiency of the RAS system

RAS technical manager Massimiliano Bruno explains that the system is installed inside an insulated box divided into three sections. Each production unit consists of 24 independent 500-liter tanks with a total volume of 27 cubic meters, including biological filtration and wastewater recovery tanks. Water saving is one of the strengths of the system: Only 2 percent of water is freshly introduced each day, while the rest is continuously filtered and reused, significantly reducing water consumption compared to other farming methods.

Successful collaboration

Sante Ansferri at ETW designed and built a multifunctional RAS-based plant with 24 tanks, each moving 12 cubic meters of water. Paolo Salvioli, GF Piping Systems' Business Developer, emphasized how the project focused on careful material selection and rigorous testing for maximum efficiency and sustainability. Supported by the Center of Excellence in Agrate Brianza, they selected certified valves and process instrumentation that reduce the plant's energy and water consumption. This initiative by NaturAlleva and ETW showcases how technology and sustainability can lower the environmental impact of fish farming, setting a model for the aquaculture industry.



The design makes it possible to control a number of parameters remotely, making the system unique and inimitable.



GF's support during the design and after-sales phases was crucial in making the bespoke plant as sustainable as possible.

Customer benefits

- Excellent water and energy savings
- Choice of material also suitable for any revamping
- Support in the selection and design phase
- Plant built to support remote control
- Corrosion-free valves to provide long life and durability for the system

Where next?



Watch the video



Learn more about our offering



Visit our webpage to get in touch with your local specialist:
www.gfps.com/our-locations

The information and technical data (altogether "Data") herein are not binding, unless explicitly confirmed in writing. The Data neither constitutes any expressed, implied or warranted characteristics, nor guaranteed properties or a guaranteed durability. All Data is subject to modification. The General Terms and Conditions of Sale of Georg Fischer Piping Systems apply.