Clean water for rearing healthy fish

High-performance systems for sustainable production in RAS



Focus on AQUACULTURE



The challenge: Increasing global demand for fish as food

By 2030, the Food and Agriculture Organization of the United Nations (FAO) predicts that 62 percent of fish and seafood intended for global consumption will come from farms. As a result of this development, the use of recirculating aquaculture systems (RAS) is becoming increasingly important: they require less water and land overall and are therefore more flexible in terms of location. They also score points with higher biosecurity and productivity, lower wastewater volumes, simple monitoring and are independent of weather and environmental influences. At the same time, however, the requirements for consistently safe and high-quality RAS water treatment are increasing.



The solution: High-performance systems for various process steps

Proven DULCODES UV systems and the DULCOZON OZLa ozone system are suitable for the gentle and efficient disinfection of water in RAS. The DULCODES UV LP-PE system, made of high-density plastic, is corrosion-free and salt water resistant.

Due to the unique combination of electronic ballast technology and the patented VARIO-Flux lamps, a particularly high degree of UVC efficiency is achieved.

The DULCOZON OZLa ozone system is characterized by minimal energy consumption and maximum space savings. Thanks to modules that can be switched on and off redundantly, it offers a high level of operational reliability. The large and coloured 10" touch screen panel enables simple operation and clear process visualization.

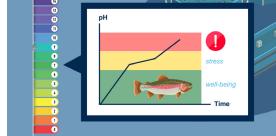
Flocculant metering and pH adjustment

The PolyRex metering system supports the sludge thickening process. The powder storage tank is filled dust-free by a vacuum conveyor. The double screw metering unit with two counter-rotating conveyor screws enables low-pulsation and precise metering and ensures the lowest possible consumption of chemicals. Controllers and pH sensors as well as metering stations and solenoid diaphragm metering pumps from our company are used to adjust the pH value.

The pH value must be kept constant for the healthy growth of the fish. This is achieved by metering calcium hydroxide with a PolyRex system.

Sludge dewatering

The eccentric screw pump SPECTRA is used for the mechanical and biological purification of the water. It is used for the low pulsation pumping of sludge.





The result: high-quality water treatment for RAS from a single source

- High-performance products from ProMinent offer high operational reliability in small and large RAS
- Consistently good water quality ensures smooth rearing of healthy fish and seafood
- UV and ozone systems for efficient disinfection minimize germ contamination
- Precise metering systems reduce the need for flocculants and other chemicals, thereby lowering operating costs
- Robust pumps support reliable sludge dewatering
- Precise sensors and versatile measuring devices ensure seamless monitoring of water parameters and pH adjustment
- DULCONNEX digital networking of the system components enables location-independent system monitoring in real time to increase process reliability and system efficiency
- Comprehensive services such as worldwide commissioning, training and service offer optimum customer support

