



# AQUACULTURE CASE



## **Superior Water Secures High Quality Organic Fish**

### **The Case**

Langsand Laks (Atlantic Sapphire) wanted to be the first commercial-sized Atlantic salmon farm in the world. Growing environmentally friendly salmon on land in a Recirculating Aquaculture System. Therefore they were looking for a supplier with breaking-edge water treatment technology.



## The Solution

**One of the crucial points in Langsand was to secure bacteria-free feedwater to avoid any diseases affecting the fish. Diseases mean loss of the fish stock and waste of months of hard work. Also important was the reduction of antibiotics and chemicals to reduce the impact on the environment.**

The Solution was a high-tech water treatment system from LiqTech, featuring ultrafiltration membranes. It was chosen based on its ability to provide the best and most reliable water filtration technique together with a clean and consistent water quality. The membranes are seawater resistant and provide supreme bacteria-free seawater.

Today, the ultrafiltration systems provide Langsand with superior feedwater, to secure healthy, organic, and environmentally friendly salmon farmed with no use of antibiotics. On top, the salmon grow faster and have less fat.



We are really satisfied with the water quality we have achieved, installing the LiqTech system. On top, we have a fantastic co-operation with the sales and service team in LiqTech.

**Lars Ditlev**

Managing Director, Langsand Laks

## **LiqTech System Design**

### **Materials and Components**

Our membrane systems are standardized and built with high-quality pumps, valves, and sensors in order to ensure operational stability and longevity. Materials of construction and sealings are selected depending on the water composition and end-user requirements. LiqTech also offers customized solutions such as containerized units.

### **Modular Systems**

The LiqTech membrane system is based on standardized membrane modules. This facilitates the option of expanding the system with additional membrane modules to further increase the capacity if necessary. These units are designed and manufactured with the objective of easy maintenance and an expedient and compact footprint.

### **Cleaning tools**

The membrane systems are as standard made with automatic backwash. Automatic CIP (cleaning in place) is optional.

### **Membrane**

The heart of the system is based on LiqTech's patented SiC ceramic membranes. These membranes are extremely robust, tolerate high temperatures, aggressive cleaning, and have a long lifetime. The SiC ceramic membranes are available with pore sizes in the MF spectrum and the UF spectrum as well, serving a wide range of applications.

### **Control**

The systems are fully automated and may be remotely monitored and controlled.

# LiqTech Installation



- LiqTech ultrafiltration system
- Automatic CIP system
- A remote management control system
- Bacteria free feedwater
- 20 silicon carbide ceramic membranes
- Turnkey with full PLC control system and remote control
- 1000 MT/yearly production

**We are here to help you**