

Case story

Goodtech – Calanus AS

Small but mighty – Unlocking omega-3 power from the ocean's most underestimated resource

Calanus AS is transforming how the world sources omega-3. By utilising *Calanus finmarchicus*, the ocean's most plentiful zooplankton, this Norwegian biotech pioneer has established a fully sustainable value chain that converts one of the Arctic's smallest organisms into high-value oils and biomaterials. Their state-of-the-art facility in northern Norway uses Alfa Laval technology throughout the production process, demonstrating how the right partnerships can drive both health and environmental progress.





Collaboration at its best: Goodtech and Alfa Laval

A key element in the plant's success was the close collaboration between Goodtech and Alfa Laval. Built on decades of trust, the partnership ensured that every process step, from heating and pumping to cleaning, was supported by Alfa Laval's proven hygienic portfolio.

Goodtech incorporated Alfa Laval valves, pumps, and heat exchangers throughout the facility. These components protect product quality, maintain gentle processing conditions for sensitive marine lipids, and ensure stable uptime in a demanding biomarine environment.

“With Alfa Laval, we know the technology will perform. Their expertise and support throughout engineering and commissioning gave us the confidence to push innovation further while keeping the system robust and efficient.”

Svein Hovden, Project Manager Goodtech

From arctic research to industrial breakthrough

Based in Tromsø, Norway's leading research hub, Calanus AS has developed an innovative approach to harvesting and processing Calanus finmarchicus, the largest renewable resource in the Norwegian Sea. The company produces functional health and nutrition products for humans, pets, aquaculture, and animals under the brand name Zooca®, all leveraging the unique properties of calanus oil and proteins.

To expand their innovation, Calanus AS began constructing a next-generation processing plant in 2019. The factory needed to adhere to strict hygienic design standards, ensure gentle handling of delicate biomaterials, and remain adaptable enough to process a variety of inputs, including zooplankton, marine fish, salmon, seaweed, and others. These raw materials are converted into three main products: oil, meal, and protein concentrate.

The challenge: Build a future-proof factory from the ground up

To realize this ambitious vision, Calanus AS partnered with Goodtech – one of Norway's leading technology integrators specialising in industrial automation, digitalization, and engineering. Goodtech was responsible for the entire construction:

- Concept development and engineering
- Equipment selection and procurement
- Installation and commissioning
- Automation and control systems
- Training and long-term after-sales support

The production line required a robust hydrolysis process, smart raw material handling, and a flexible layout capable of adapting to new biological feedstocks and emerging product opportunities. Reliability, hygiene, and operational efficiency were non-negotiable.





Alfa Laval has supplied hygienic valves, hygienic heat-exchangers, hygienic pumps, CIP cleaning nozzles, and tank agitators, as well as control components that enable efficient operation and water savings for the factory.

Since its launch, the production line has been running smoothly and delivering as planned. Alfa Laval's proactive maintenance ensures reliable operations and a safe, efficient production environment.

A factory that works hard and thinks ahead

One of the most forward-looking features of the Calanus plant is its flexibility. When not operating at full capacity, Calanus opens the facility to other companies for R&D, pilot-scale trials, and new product development. This transforms the plant into both a production engine and an innovation ecosystem for Norway's marine-based industries.

Goodtech and Alfa Laval technology enable this versatility: hygienic, modular, and automation-ready systems ensure quick transitions between materials and processes.

A blueprint for future growth

Following the success of the Calanus project, Goodtech is exploring opportunities to replicate the plant's modular and scalable design for other nutrition and biomarine producers. The Goodtech-Alfa Laval partnership plays a key role in this vision, combining engineering excellence with hygienic processing expertise to accelerate sustainable growth across the omega-3 and biomarine sectors.

“This factory is not just the place where we produce today's products, it's where we design tomorrow's nutrition solutions.”

Snorre Angell, CEO Calanus AS

More about Calanus AS

Calanus AS is a pioneering Norwegian biotechnology company focused on unlocking the potential of the ocean's smallest yet most abundant resource: the zooplankton *Calanus finmarchicus*. Based in Norway, Calanus utilises advanced, sustainable harvesting and processing technologies to produce premium marine ingredients for the global nutrition, health, and aquaculture markets.

Environmental stewardship is central to Calanus's mission. The company adheres to strict quotas and sustainable practices, minimizing its impact on marine ecosystems. Its innovative approach promotes the health of both people and the planet, aligning with global goals for responsible resource management.

Calanus AS invests significantly in research and development, collaborating with leading scientific institutions to explore new applications for marine biomaterials. Its commitment to innovation drives the development of next-generation products that meet the evolving needs of consumers and industry partners.

More about Goodtech

For more than 50 years, Goodtech has been a trusted partner in delivering hygienic food production solutions. They specialize in EPCI (Engineering, Procurement, Construction, and Installation) deliveries, combining decades of experience with multidisciplinary teams covering process engineering, automation, and technical design.

They are a local partner with a strong presence in Norway and understand the industry's stringent requirements for hygiene, safety, and efficiency. Goodtech solutions are designed to meet these standards while ensuring optimal performance and reliability.



Contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com

