



Alfa Laval Fluid Handling
Application & Innovation Centre





A world of pure innovation awaits you

Alfa Laval has long forged close partnerships with our customers. By better understanding your applications, we continuously advance the possibilities of hygienic fluid handling technology.

Our state-of-the-art Fluid Handling Application & Innovation Centre in Kolding, Denmark takes this successful collaboration to the next level.

With industry experts who can offer performance quantification and verification, you will discover unique opportunities for process optimization.

Experience tomorrow's fluid handling concepts for boosting yield, securing hygienic safety, reducing operating costs and strengthening your sustainable profile.



"Simulating our production, Alfa Laval performed real trials to quantify possible water and energy savings. We're now saving 1.2 million litres of water every year, and our investment in new automation had a payback of only 4 months!"

- A European dairy customer



"A hygienic 'zero tolerance' production is a must today. We asked Alfa Laval to perform a cleaning trial for our home care cream cleaner in order to replace our current spray heads. In performing about 20 CIP duties per month, we found that their Alfa Laval TJ20G had a payback of only 6 months - due to the water savings alone. Furthermore, cleaning was significantly improved, with manual rework no longer necessary. We can 100% recommend contacting Alfa Laval!"

- A leading global home and personal care manufacturer



"As a mid-sized German system builder, we are under constant pressure from competition. Having conducted a trial with a HPM15 powder mixer at the Alfa Laval Application & Innovation Centre, we were able to maximize the customer's xanthan concentration formula and accurately predict production cost! Alfa Laval's expertise helped us secure this important order."

- A German integrator



"After a whole day of constructive testing in Alfa Laval's pilot plant, we have learned more about what it takes to clean our mixing tank. Alfa Laval demonstrated that we can clean the tank in just seventeen minutes using an Alfa Laval TJ20G. In other words, that's time savings of 60%. Our objective for the test was to find an effective cleaning solution that would ensure we do not get any cross contamination in our production when we switch between different products. At the same time, we looked at minimizing waste, which the TJ20G proved capable of doing."

- A leading global colorant/paint producer

A world of pure innovation awaits you – visit our website today to learn more and schedule your visit!

[www.alfalaval.com/
ApplicationKolding](http://www.alfalaval.com/ApplicationKolding)



Taking your production to the next level

At the Fluid Handling Application & Innovation Centre, we have experienced experts to match you with the right equipment for your duty and the specific demands of your business.

Pumping

We can help you evaluate the impact of different pump types and pump operation on the quality of your products by conducting trials based on your actual process conditions. This makes it easy for you to select the best pump technology from our comprehensive portfolio of solutions, including:

- Centrifugal pumps
- Rotary lobe pumps
- Circumferential piston pumps
- Twin-screw pumps

Solutions are available for capacities ranging from 1 m³/hr to over 100 m³/hr.

Valve optimization

Parameters such as seal composition, valve size or the type of technology directly influence a process line's cleanability, performance and maintenance. At the Fluid Handling Application & Innovation Centre, we can evaluate the whole Alfa Laval range of hygienic valves under your specific production and cleaning-in-place (CIP) conditions.

For mixproof valves in particular, the cleaning process can have a big impact on your water and chemical consumption and, as a result, your overall operational costs. We can also work with you to optimize CIP performance for mixproof valve clusters.



Cleaning

With more companies looking to increase batch turnover and run multiple recipes on the same equipment, it has never been more essential to shorten time for cleaning-in-place (CIP) without compromising hygiene. We work with you to optimize your cleaning processes for improved uptime, while minimizing the consumption of water and chemicals that drive operational costs.

Run trials with our full range of tank cleaning technologies, in scales up to 20 m³ and with the possibility of replicating conditions in much larger tanks. With a two-tank system for cleaning fluids on site, we can mimic your CIP recipe and adjust the temperature as needed.

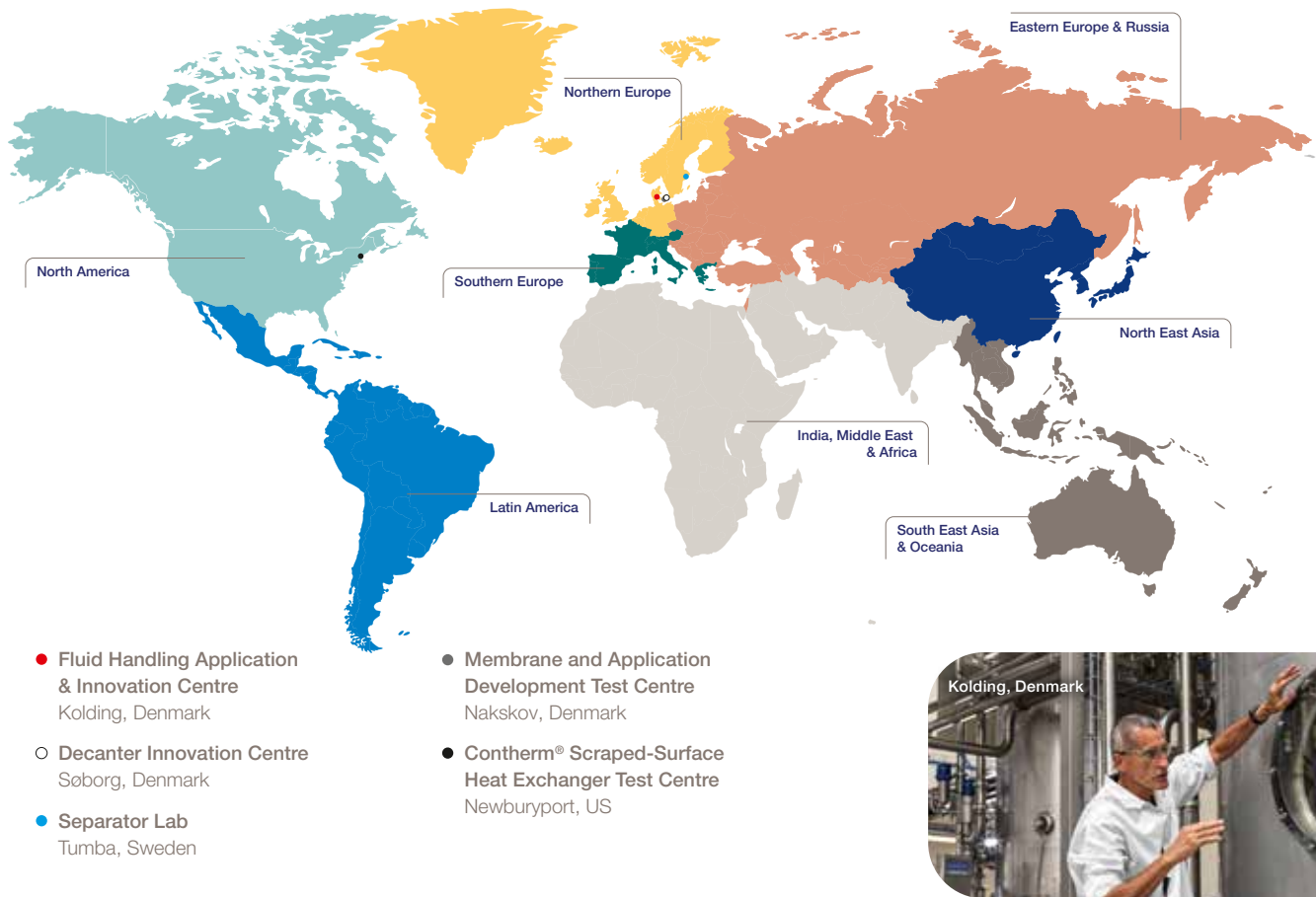
Mixing & Dispersion

Explore a wide range of mixing and dispersion solutions for scales up to 20 m³. We can operate close to your actual production scale to avoid a change in process results during scale-up. Our technologies include:

- The Alfa Laval Hybrid Powder Mixer for in-line dispersion of all types of powders, including gums and protein isolate
- The Alfa Laval LeviMag® Magnetic Mixer, typically used in pharmaceutical and aseptic processing
- The innovative Alfa Laval Rotary Jet Mixer for liquid blending and dispersion of gases and powders in liquid, which can also be used for CIP
- The Alfa Laval EnSaFoil™ and EnSaFerm™ Agitators for energy-efficient mixing of liquids and for gentle agitation of particles in suspension

Part of our global customer test centre network

Alfa Laval presence with local application support



Fluid Handling Application & Innovation Centre in Kolding, Denmark

Industries: Any business looking for optimization of hygienic processes, technology and sizing validation prior to investments, as well as those interested in a sustainability assessment. This includes manufacturers, integrators and systems builders in the dairy, beverage, food, pharma and home-personal care industries.

Process equipment: The complete Alfa Laval Hygienic Fluid Handling portfolio including pumps, valves, tank cleaning equipment, and dispersion and mixing equipment.

Technical capabilities:

- Ambient and cold storage for liquid and solid products
- Reception, transfer and processing of fluid volumes up to 20 m³
- Fluid heating and cooling
- Tank cleaning with dedicated two-tank CIP station allowing optimization with customer-specific CIP recipe
- Powder dispersion, liquid mixing and agitation, and gas dispersion capabilities in scales from a few hundred litres to 20 m³
- Flexible pump setup
- Valve setup with the possibility of adding valves for neck-to-neck comparison
- Full automation with real-time monitoring

Health, Safety, Environment: We follow the guidelines from ISO 45001 in relation to health and safety and ISO 14001 in relation to the environment and in addition all EU regulations as implemented under Danish law to avoid any negative impact on people or the environment.

Resources: A dedicated team of application and technology experts are at your service.

Location: Albuen 31, 6000 Kolding, Denmark, located 30 min. from Billund Airport

Contact: Ready to find out more? A world of pure innovation awaits you!
Visit us online at www.alfalaval.com/ApplicationKolding or send an email to Application.Kolding@alfalaval.com to learn about scheduling a visit.



This is Alfa Laval

Alfa Laval is active in the areas of Energy, Marine, and Food & Water, offering its expertise, products, and service to a wide range of industries in some 100 countries. The company is committed to optimizing processes, creating responsible growth, and driving progress – always going the extra mile to support customers in achieving their business goals and sustainability targets.

Alfa Laval's innovative technologies are dedicated to purifying, refining, and reusing materials, promoting more responsible use of natural resources. They contribute to improved energy efficiency and heat recovery, better water treatment, and reduced emissions. Thereby, Alfa Laval is not only accelerating success for its customers, but also for people and the planet. Making the world better, every day. It's all about *Advancing better™*.

How to contact Alfa Laval

Contact details for all countries are continually up-dated on our web site. Please visit www.alfalaval.com to access the information.

