

# Optimize™

by Alfa Laval

Unlock the sustainability  
of your business



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Don't stay standard.  
Optimize™  
by Alfa Laval



## Accelerate production sustainability with enhanced processes

Sustainable food & pharma manufacturing begins with optimized processes. By making every process step as reliable and efficient as possible.

And eliminating wasteful handling of water, energy, and product. Achieving real sustainability at the very core of your business.

Optimize™ by Alfa Laval accelerates your sustainability efforts by enhancing your existing processes. Together we can optimize your processes to accomplish more with less, without straining your operation or budget. Enabling substantial savings in water, energy, and chemicals to make your business part of a truly sustainable future.

### Ensure competitive pricing of your product, by:

- Reduce waste and emissions
- Secure safe, efficient, and hygienic production
- Get the most from your raw materials



## The Optimize™ journey

Optimize™ by Alfa Laval is a close collaboration between you and our sustainability and process experts.

Together, we navigate the path to accelerated sustainability in your production.



### 1. Onsite survey

First, we analyze the performance of your current processing setup. Identifying where an upgrade, replacement, or addition can bring substantial improvements such as savings in water, energy, and chemicals. We hand over a detailed report with conclusions – no strings attached.



### 2. Finding the best fit

Then, we find the best fit for your application among Alfa Laval's wide assortment of components and services.



### 3. Making it work for you

Finally, we agree on installation, financing, and maintenance planning. Tailoring a solution that works for you. Letting you focus on your core activities with complete peace of mind.



## The time to act is now

Optimize™ by Alfa Laval lets you take a proactive approach to process optimization and sustainability. It enables tangible savings and the opportunity to show leadership in sustainable food, beverage and pharma production. The time is now. Let's do it together.

### **Boosting process reliability**

Reliable equipment prevent the waste of time, energy, and raw materials. High processing efficiency and straightforward maintenance help reduce the risk of costly equipment failures. Alfa Laval components are built for optimal reliability. And with connectivity-based condition monitoring, it's easy to stay ahead of events. Avoiding wasteful replacements and over-maintenance.

### **Using your resources wisely**

Highly efficient equipment is the best way to lower consumption of water, energy, and chemicals. Systems that re-use or recycle resources can be helpful but are often themselves cost-intensive, with lower resource quality for every cycle. When optimizing with Alfa Laval components to reduce waste, you also reduce the need for costly recycling processes.

### **→ CASE: New pumps boost dairy efficiency**

At a major Danish dairy, an audit of the whey filtration application revealed significant savings potential in energy, maintenance, and carbon emissions. Performance data from two non-Alfa Laval pumps was particularly disappointing.

The pumps were replaced with energy-efficient Alfa Laval LKH pumps. Resulting in 20% lower energy consumption, extended uptime, longer service intervals, reduced CO<sub>2</sub> emissions and a better working environment.

[Read more at alfalaval.com/optimize](https://www.alfalaval.com/optimize)

# Reach your sustainability goals

Whatever goals you have set for your production, every installation of a new Alfa Laval processing component will be a milestone.

Enabling new levels of optimization, with significant savings of valuable resources:



## Reducing water consumption

Thanks to unique efficiency, Alfa Laval valves upgraded with our latest ThinkTop units can save up to 90% of water during cleaning in place (CIP). It's a simple, worthwhile upgrade that pays back quickly.



## Reducing energy consumption

Onsite surveys often show that installed pumps do not perform optimally. This can be due to a change in duty or product, or simply because it was the wrong choice to begin with. Whatever the cause, significant cuts in energy consumption are attainable with Alfa Laval pumps, such as the innovative DuraCirc.



## Reducing chemicals consumption

CIP chemicals are costly. So are the processes involved in recirculating them. And at some point they must be treated as waste. As an example, the right cleaning equipment will enable drastic reductions in the chemicals required to clean your tanks.

# Start your Optimize™ journey with a leap

Alfa Laval's full portfolio holds the answer to your optimization and sustainability challenges. Upgrading your valve with new generation ThinkTops is a great way to start.

No operational risk. Quick and easy installation without process interruption.

## No financial risk.

Speedy payback through drastic water savings.

## No product quality risk.

Secure, optimized hygiene.

## Example:

A European dairy, upgrading 66 valves with ThinkTop V70:

**70,000 kwh**  
per year saved in liquid heating

**1,400m3**  
CIP media saved every year

**16 tonnes**  
lower annual CO2 emissions

**<2 years**  
payback period

With maintained mechanical and biological cleaning efficiency.

## → CASE: Major energy savings

A leading European producer of fine cheese, Milchwerke Oberfranken decided to test the Alfa Laval ALS agitator in their newly installed 360,000 litre tank. They found that the agitator met all their processing expectations. The big difference being that the unique ALS design enabled a 78% energy reduction compared with the currently installed agitators.

Recognizing the big energy saving potential, the dairy decided to retrofit another 11 tanks with ALS agitators. Making a tangible reduction to the plant's environmental footprint.

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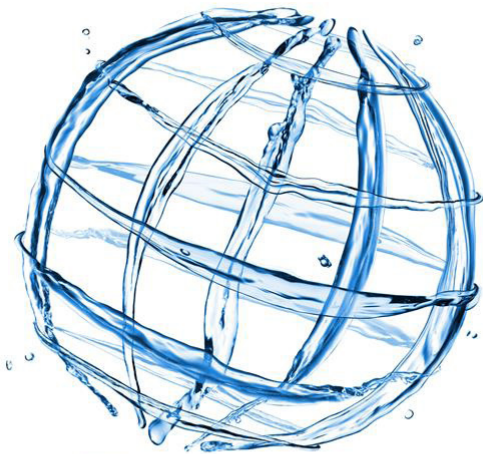
# Unlocking sustainability and productivity with optimized CIP

On average, 20% of a food & beverage manufacturing plant's energy consumption is used for cleaning in place (CIP).

Upgrading with Alfa Laval equipment can bring significant energy savings, together with cuts in water- and chemicals consumption. With quicker and more efficient CIP, your operation gains in economy and sustainability without compromising on hygiene.

## More resource-efficient CIP

- Alfa Laval valves can save up to 90% of water and chemicals during CIP.
- Alfa Laval tank cleaning systems can cut water consumption by 70%.
- Alfa Laval pumps can reduce energy consumption by 30%.



## 360° Service Portfolio

Alfa Laval offers comprehensive solutions for securing and enhancing performance throughout your equipment's life cycle.

Making sure that your Optimize™ journey remains smooth and beneficial over time. Whatever your equipment's type or age, there are options to safeguard or enhance its operation. The Alfa Laval 360° Service Portfolio offers full support – from planning, installation and commissioning to advice on the best replacement if the time comes.

### Services to match your needs

You choose the options that are right for you. In delivering your selection, Alfa Laval's global service network follows guidelines that ensure quality, safety and minimized environmental impact.

### → CASE: Problem solved with jet head upgrade

About to take on a major new contract, the brewery needed to optimize CIP of their horizontal fermenters. An audit of existing equipment indicated that Alfa Laval GJ PF FT rotary jet heads would be the perfect fit; cutting downtime, optimizing cleaning performance, and minimizing water- and chemical consumption.

This promise was kept, according to the brewery's chief engineer: "Retrofitting our fermentation tanks with Alfa Laval jet heads solved everything. The tanks have never been cleaner."

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# Seeing is believing

Welcome to the Fluid Handling Application & Innovation Centre in Kolding, Denmark.

At the Centre, our experienced experts are ready match your process with the right equipment to reach your Optimize™ goals. With detailed analysis and simulations to make sure that you get optimal performance and accelerated sustainability in your production.

## Pumping

At the centre, we can conduct trials based on your actual process conditions. Helping you evaluate the impact of different pump types and pump operation. Making it easy for you to select the most efficient and sustainable pump technology for your application.

## Flow management

Alfa Laval hygienic valves enable safer, more efficient flow management. With substantial savings of water and chemicals during CIP. At the Fluid Handling Application & Innovation Centre, you can evaluate how Alfa Laval hygienic valves will perform under your specific production- and CIP conditions. Giving you the assurance needed to make the right choice.

## Cleaning

Traditionally, CIP is a water- and chemical intensive process. At the Centre, we can closely simulate your production conditions to show you the potential of optimized CIP with Alfa Laval components: quicker and more efficient, using less water and CIP media. With no compromise on hygiene.

## Mixing & Dispersion

There are significant power savings to be made with Alfa Laval's highly efficient mixing- and dispersion solutions. At the Centre, we can operate close to your actual production scale to avoid a change in process results at scale-up.



### → CASE: Big savings after visiting the Centre

"Simulating our production at the Centre, Alfa Laval performed 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 period of only 4 months!"  
- A European dairy producer

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Contact us to book a visit to the Fluid Handling Application & Innovation Centre.

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



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