The background of the page is a photograph of a river. In the upper part, there are trees with green and yellow leaves. The water is calm, reflecting the sky and the trees. A prominent feature is a tall, cylindrical industrial chimney or stack that is reflected in the water, extending from the top of the frame down to the bottom. The reflection is very clear and detailed.

# Industrial wastewater solutions

Improve your efficiency and sustainability with world-leading solutions from Alfa Laval

# A more circular approach

Moving towards more circular business models is essential for being able to operate in a more sustainable way. As industrial processes use significant amounts of water, becoming more circular means understanding how this water can be saved and reused, and investing in methods which allow you to reuse, recycle or sell waste by products.

Alfa Laval offers a wide range of solutions for wastewater treatment, while our expertise in sustainability helps you discover how you can make your business more circular by improving energy efficiency and productivity while reducing overall waste.

## **Turn waste into value**

Effectively dealing with industrial wastewater is often a legal obligation, and necessary in order to retain your license to operate. However, the process itself can actually improve profit margins if it is done in the right way.

By applying a thorough separation process and by reusing the water, not only will you reduce operational costs but it's also possible to recover valuable material in the waste that otherwise would have been lost. Alfa Laval has the range, knowledge and expertise to be able to provide the right solution for your specific requirements.



## Contributing to the UN Global Goals

The United Nations Global Goals are 17 objectives which have been adopted by the UN, and various world leaders and leading businesses have pledged to achieve them by 2030. These Sustainable Development Goals tackle a wide range of global issues, from eliminating global hunger to protecting life on land and in the sea. Industrial wastewater treatment can help contribute to achieving a number of these goals, including:

- **Clean water and sanitation.** Treating wastewater removes contaminants so that they can be safely disposed of, while also allowing water to be recycled and reused.
- **Industry, innovation and infrastructure.** The goal here is to make industry more sustainable, and effective wastewater treatment makes a real difference here.
- **Responsible consumption and production.** Wastewater treatment allows industries to reuse more water, reducing resource consumption and improving sustainability.



Industrial wastewater treatment can help make a positive contribution to most, if not all, of the UN Global Goals either directly or indirectly.

# Solutions that offer outstanding separation performance



Alfa Laval offers a range of products dedicated to handling industrial wastewater, from our high-performance decanter centrifuges to the best-in-class Zero Liquid Discharge solution.

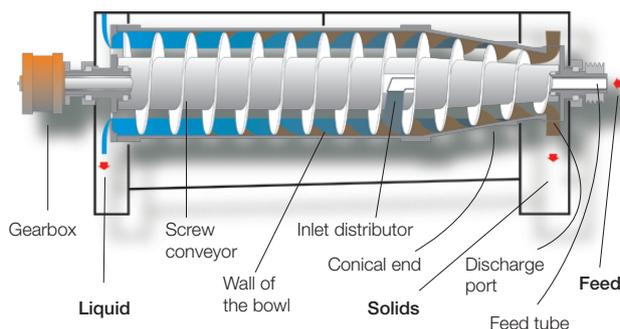
## Decaners for industrial wastewater

Alfa Laval decanter centrifuges are designed to perform at optimal levels even in the most challenging industrial applications. They offer outstanding efficiency, performance and reliability while helping you to achieve your sustainability goals.

The available solutions cover a wide range of capacities and they are easy to install, operate and maintain, which helps reduce operational costs.

Alfa Laval decaners offer a number of significant benefits, including:

- Reduction of sludge volume, which reduces transport and disposal costs
- High capacity with a small footprint: compact, modular design saves space
- High performance combined with low energy consumption



## Decaners in action

The LYNX Decanter from Alfa Laval is the most robust decanter available, and one is currently in operation in the desert town of Zhanaozen, Kazakhstan, where it is used to recover slop oil from a polluted lake.

## Zero Liquid Discharge is the total solution for wastewater reduction

Alfa Laval Zero Liquid Discharge systems are robust, compact solutions designed for the absolute minimization of liquid discharge in a wide range of industrial waste applications. ZLD is ideal for the reduction of wastewater as well as optimal product recovery.

ZLD systems work via a combination of thermal solutions and separation technology, with the AlfaFlash evaporator at the core of the set up. Our proven track

record and extensive experience in both thermal solutions and separation technology ensure a cost-efficient, high-performance solution. Key benefits include:

- Low investment, installation and operational costs
- Special heat exchanger plate design minimizes fouling and scaling
- High efficiency reduces heat transfer area required
- Can operate cost effectively at vacuum thereby reducing scaling risks
- Cost-effective maintenance – 100% cleanable and inspectable heat transfer surfaces

## See the results for yourself

It's possible to book time with our Zero Liquid Discharge test unit to be able to see how our solution can have a real positive impact on your business. Get in touch with one of our team to find out more.



## ZLD in action

Thanks to Alfa Laval water treatment systems, Harinagar Sugar Mills in India is able to recycle around 800,000 litres of water every single day. This reduces the need for cleaning as well as cutting operational costs, meaning the business was able to boost profitability through a Zero Liquid Discharge approach.

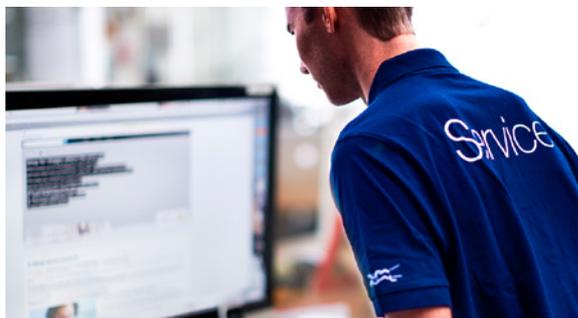




# World class service that keeps you going

Wherever you are in the world, our dedicated team of service engineers are here to help. With Alfa Laval as a service partner, you can ensure that you maximize your return on investment while securing long-lasting performance and efficiency.

We offer a wide range of support, covering everything from scheduled maintenance to genuine spare parts when you need them, while our training and technical documentation is second to none.



## **Optimize performance with connected services**

Where possible, we can offer remote servicing for a wide range of our smart industrial wastewater solutions. This saves time and money while preventing unscheduled downtime.

Remote monitoring allows our service engineers to perform analysis and diagnostics while you speak to them, dramatically reducing the amount of time it takes to discover issues and find the right solution, whether that's replacing a part or carrying out a repair on site.

Remote access is not just for service and maintenance – it also allows you to look at your decanter centrifuges through Alfa Laval's service web. This means you can analyze from distance and optimize performance.

ConditionAlert is another connected feature which allows for predictive maintenance and optimized service intervals. This is enabled through sensors which track the condition of the decanter's critical components. Information is sent to Alfa Laval at regular intervals and if irregularities are detected, our service engineers will get in touch and assess what needs to be done.

# Calculate your savings

We know that our technology can save you significant amounts in terms of operational costs, energy expenses and wastewater handling. How much exactly depends on your application area and operational parameters, but to help you to discover just how much of a difference Alfa Laval solutions can make, we have made a calculator which enables you to see just how much you could save.



Every m<sup>3</sup> of water and every kW of energy you recover is one step towards reducing your environmental footprint – and your costs.

## Your water consumption.

Cost/m <sup>3</sup>	m <sup>3</sup> /year	Costs/year
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## Wastewater generated.

Cost/m <sup>3</sup>	m <sup>3</sup> /year	Discharge fees/year
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Saving potential if water is reused	%	Saved costs
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## Waste stream for disposal.

Cost/m <sup>3</sup>	Tons/year or trucks/month	Costs/year (transport + disposal)
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Saving potential if waste is	Reduced by, %	Saved costs/year
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## Valuable by-products that can be recovered?

Quantity of by-products	Tons/year	Trucks/month
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## Quantity you can recycle or sell.

Cost or income/m <sup>3</sup>	Tons/year or %	Saved raw material costs or income/year
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If you want to convert a cost center into a profit center, Alfa Laval is there to support you – from business case to selecting, installing and servicing the right solutions from our complete spectrum.



### **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 updated on our web site. Please visit [www.alfalaval.com](http://www.alfalaval.com) to access the information.

