




Minimizing costs is only half the story.

Innovative Parts and Service solutions for wastewater treatment.





Minimizing environmental impact is the other half.

Get more out of your Alfa Laval assets by getting less. Less running costs, less dewatered sludge and less impact on the environment. The Parts and Service division brings you a combination of technological innovation and expertise to help you extract optimum performance from your wastewater treatment plant.

We understand that you are facing new challenges every day. There is pressure to deliver improved performance and profitability, reduce your total cost of ownership and ensure optimum plant availability – and maintain high environmental standards at the same time.

Our products and services are designed to help make it all happen.

Boost performance and profit with an upgrade.

Conveyor upgrade

Operating, maintenance and disposal costs will drop thanks to higher cake dryness, higher throughput or lower polymer consumption.

Using state-of-the-art equipment equals less frequent maintenance and increased capacity per machine, and upgrading the wear protection on your conveyor will extend its life. The parts upgrade is relatively smooth, as there is no need to modify the bowl or backdrive assembly of your existing centrifuge. It can be completed during your next scheduled service.

The conveyor is a core component of the upgrade. Its design is based on the G2 centrifuge range, which has been long-proven to increase a centrifuge's efficiency. With its replaceable feed zone wear liners, less frequent repairing and replacing of parts is required. It can be retrofitted to most Alfa Laval and Alfa Laval Sharples centrifuges less than 20 years old.

The upgrade may also include an enhanced wear protection package to lower maintenance costs and increase the uptime of the decanter.

Backdrive upgrade

Depending on the scope of the upgrade, you can also realize the benefits of noise reduction, faster response to feed changes, drier sludge cake, or lower repair and maintenance costs.

Upgrading the backdrive has typically delivered a power savings of 15-20%, a reduction in maintenance costs and optimal decanter control. Depending on how the decanter configuration is changed, the upgrade may offer a number of additional benefits.

When upgrading to a more powerful backdrive, you will produce a drier sludge cake. A reduction of heat and noise is a result of more efficient backdrive parts. The upgrade service will be coordinated with you to ensure maximum uptime. In addition, the decanter will occupy the same space after the upgrade.



Environmental benefits

If you can dewater a batch of sludge with the same size centrifuge in less time, you will consume less power overall.

Your centrifuge will also require less overall power consumption for a given volume of sludge. The conveyor and backdrive upgrades are comprised of an initial audit, full service parts replacement and a verification test. Utilizing our depth of experience, your current decanter system's performance and durability are analyzed.

Opportunities for improvement are identified and an offer is tailored to meet your specific needs. Through a performance analysis and retrofit with highly efficient Alfa Laval equipment, your decanter's performance is optimized.

After selecting and installing the new parts, our specialists will be able to optimize the decanter's operation to achieve energy savings, performance improvements and maintenance savings. Monitoring and analysis are conducted after the upgrade is completed. Reports are delivered on the performance – before and after the upgrade.

The job is not over until everyone is satisfied. We make sure you get the promised results – we don't leave until you sign a Certificate of Acceptance.

Give your plant its own brain to get ultimate efficiency.

Octopus constantly optimizes your dewatering system

With the rising cost of polymer, the need for a system that cuts consumption to an absolute minimum is growing. The never-ending variation in quality, consistency and solids content of sludge makes it a challenge to keep your dewatering system running at peak efficiency all the time. That is why we created Octopus. It serves as a brain for your dewatering system to keep it optimized around the clock.

How Octopus thinks

Octopus only has one thing on its mind: keeping the process optimized. It does this by monitoring, controlling and adjusting all aspects of the dewatering process.

Unique software is at the heart of Octopus. It monitors and controls the sludge feed rate, polymer dosing and internal settings used in the decanter.

State-of-the-art infrared sensors continuously send information to the software. The information is analyzed and the necessary adjustments are automatically made to keep your dewatering process running at peak performance – 24 hours a day, all on its own.

Benefits in cost reduction – and more

You stand to save considerably on total dewatering costs (5-10%), depending

on your local cost for polymer, cake transport and cake disposal. The Octopus system will therefore realize its own payback. In addition there will be an optimisation of manpower through the utilization of operation skills elsewhere in the plant. Total plant optimization and intelligent "autopilot" systems are sheer genius.

COSMOS gives you a universe of information for maximum uptime

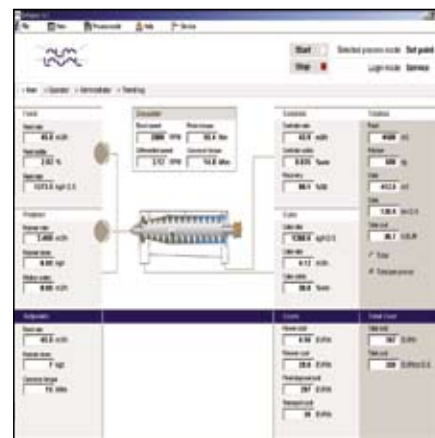
Every minute your plant is shut down costs you money. The COSMOS centrifuge condition monitoring system helps you maintain maximum uptime. It provides you with comprehensive information on the state of your equipment to keep processes rolling at peak efficiency – without any unwelcome surprises.

How COSMOS keeps you on top

COSMOS monitors the bearings, couplings, bushings, bowls and other vital moving assemblies of your decanters. Combined with a computer, data-receiving unit and sensors, it continuously monitors the vibration patterns in each target machine. This information is then translated into 13 parameters, which illustrate the rotational, frictional and shock forces at work. The information can be accessed onsite or remotely. It shows you immediately when components show evidence of wear or deterioration. A trained operator or service engineer can then determine what needs to be done – before problems arise.

The benefits of knowing more

COSMOS will help you reduce downtime by enabling you to plan ahead. Spares can be ordered and parts replaced more quickly and shutdowns organized more efficiently. It will also minimize the need for you to keep parts in stock, as our Field Service personnel will have the correct parts on hand during their scheduled visits.



Optimize efficiency and uptime with our training program.

Training overview

It takes more than quality equipment to make an efficient plant. To get the most out of your process, your operators need to be highly skilled and knowledgeable. With our training offer, we transfer our wastewater treatment expertise to you. The training will lead to reduced energy consumption, less maintenance costs and greater uptime for a more profitable plant.

How the training program works

The training covers the processes of dewatering, thickening and heat exchange. Choose between a two-day pre-tailored course package or a one-day basic program. If neither meets your needs, you can tailor your own program by selecting the courses you want. Use our expertise to focus on getting the best performance from your equipment, refreshing your knowledge of the basics, or anything in between.

Participants will be trained both in the classroom and onsite at your plant. Some of the topics the training covers are operation optimization, erosion and corrosion, troubleshooting and maintenance. You will learn how to optimize the performance of your equipment, identify problems before they become critical and fix minor issues yourself as they come up.

The benefits of increased proficiency

Your plant will have greater uptime – thanks to fewer breakdowns – resulting in reduced maintenance costs and less money lost due to stoppages. Optimization of the process will result in less polymer consumption, higher cake dryness and less energy consumption. Your plant will run more efficiently and be better able to meet environmental regulations – all using the same equipment you use today.

Our tailor-made training will result in:

- Prolonged service life and life of the equipment
- Optimized productivity
- Less downtime and fewer unplanned shutdowns
- Improved safety
- Empowerment and appreciation of your staff
- Depth of knowledge of decanters, drum thickeners and spiral heat exchangers
- Process knowledge of dewatering, thickening and heat exchange



Get premium expertise for premium performance with Graduated Service Engineers.

Overview

To meet the evolving demands of your plant, you need experts on the ground. We have service centers all over the world in order to serve you best, so when you call us for help, there will be a Graduated Service Engineer there to answer. It's the support you need, when you need it. Our Graduated Service Engineers fully understand the wastewater treatment process and the problems you face every day. They will help keep efficiency optimized, trouble at bay, and production rolling. We select engineers with the greatest knowledge of the entire wastewater treatment process for these positions, so you can be sure you are getting the right guidance.

How our engineers work

Our Graduated Service Engineers are not only trained to maintain and service your systems, but also to analyze them and determine the perfect performance package to best optimize your entire

process. Each has undergone extensive and rigorous training and frequently participates in "refresher" courses to get updated on the latest product developments. Their services include troubleshooting, installing upgrades, separator bowl balancing, staff training and providing recommendations for improving your plant. Call us 24 hours a day, 7 days a week for technical assistance or to ask one of our engineers to visit your plant. With our regional centers nearby, help is always close at hand.

The benefits of field service

Our Graduated Service Engineers are on call to help you maximize your plant's uptime. They help you avoid problems before they happen and solve them when they do occur. They look at the whole picture and understand the consequences of what happens in each part of the process. Their process knowledge also makes any work you need done on your equipment, smooth

and easy. They focus not only on helping make your plant operate at its best right now, but also on discovering how it can become even better in the future.

Contact us for a presentation of our toolbox of improvements and upgrades. Ask your service engineer about yet another upgrade to a better balance sheet through the installation of our new Power Plates.

Power Plates overview

Power consumption is becoming an issue because of rising energy costs. Power Plates will ensure a considerable reduction in the power consumption of your decanters and result in cost savings.

How Power Plates work

The energy content in the liquid that leaves the decanter is proportionate to the square of the velocity. Some of the liquid discharge velocity is captured by the Power Plates and transferred in the opposite direction of the bowl rotation. Therefore, the total effluent velocity is reduced, which means less energy is consumed by using Power Plates.

The benefits for you

Your power consumption will decrease, which in turn will save you money and bring you closer to meeting environmental regulations.



Solve all your parts, service and repair needs with Nonstop Performance.

Overview

Ensuring your process stays at peak performance calls for just the right service solution. Nonstop Performance is designed to keep your plant running smoothly and efficiently. It is a concept that covers everything – from supplying the smallest spare part to acting as a long-term performance partner. This will help prevent energy costs from rising due to decreased efficiency and give you the comfort of having full support. Within our four-star range, we can tailor an individual service package that will meet the complex demands of your plant.

How we help you perform better

Each level of Performance Agreement covers all of your Alfa Laval equipment. Our network of experts are on standby to help with high quality spare parts when you need them, to maximize uptime. Our specialists visit regularly to monitor and service your equipment. After every visit, you get a written status report and, at the end of each year, we review and adjust our agreement as necessary.

We appreciate that every plant has different needs. Our four levels of Performance Agreements are structured to make it as easy as possible to find the solution that is best for you – from the one-star level that covers all your basic needs, up to the four-star level where we customize performance optimization through a premium partnership.

We will work with you to ensure that your repairs and repair specifications are designed to suit your needs. The choice is yours.

The benefits of Nonstop Performance

With our industry leading expertise, you get peace of mind. We help you keep output and quality up, energy consumption down and performance optimized. Unnecessary stoppages will be avoided and any issues that do arise will be resolved quickly to give you maximum uptime.



About Alfa Laval

Alfa Laval is a leading global provider of specialized products and engineered solutions. Our equipment, systems and services are dedicated to helping customers optimize the performance of their processes. Time and time again.

We help our customers to heat, cool, separate and transport products such as oil, water, chemicals, beverages, foodstuffs, starch and pharmaceuticals.

Our worldwide organization works closely with customers in almost 100 countries to help them stay ahead.

How to contact Alfa Laval

For up-to-date Alfa Laval contact information for all countries, please visit our website at www.alfalaval.com

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