



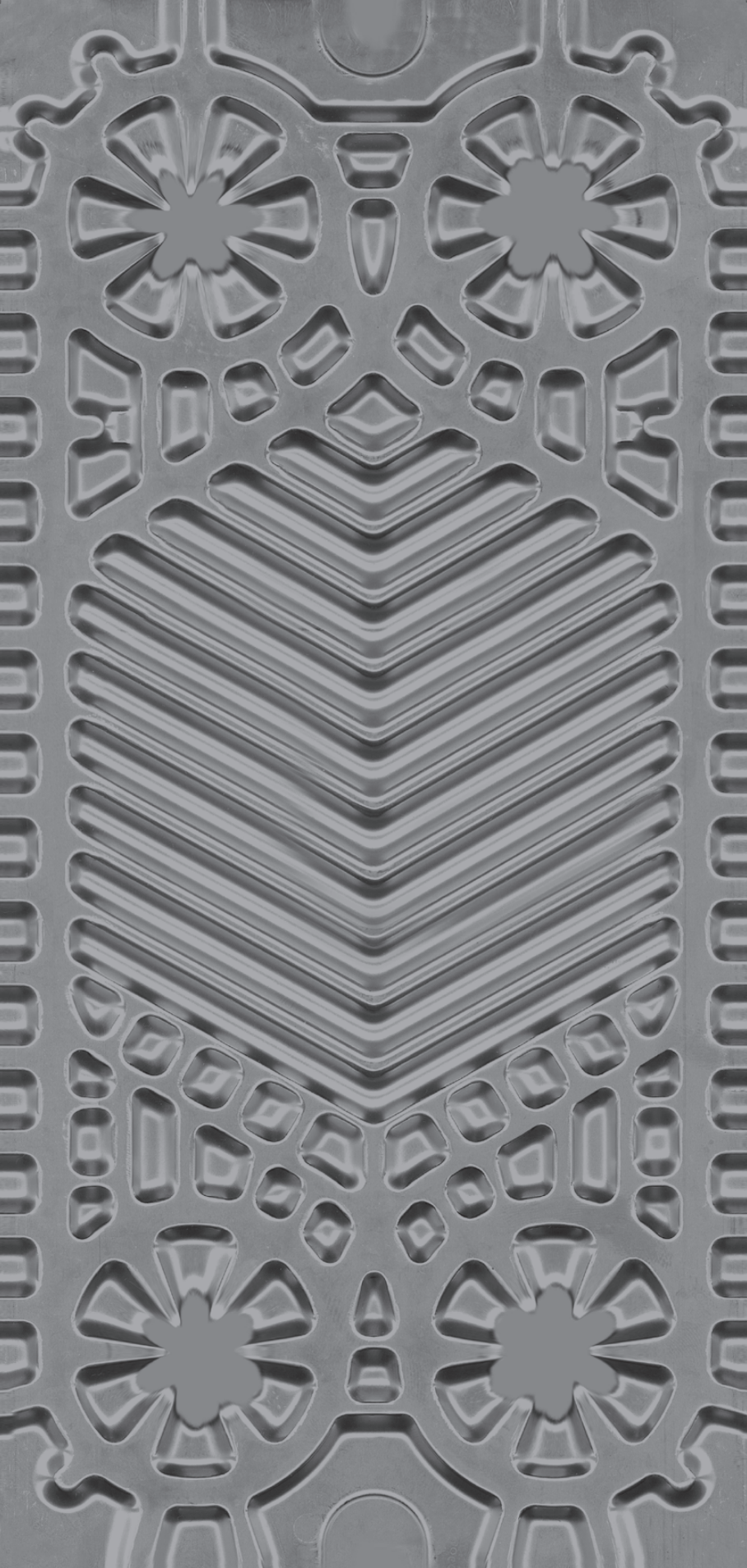
Service is  
best  
inside out

S4

S1

S3

S2



Why plan service  
in the dark?

**Service  
is best  
inside out.**

When it comes to plate heat exchangers, most people plan service from the outside in. Basing their decisions on external factors – such as arbitrary time intervals – they perform maintenance either too often or too seldom.

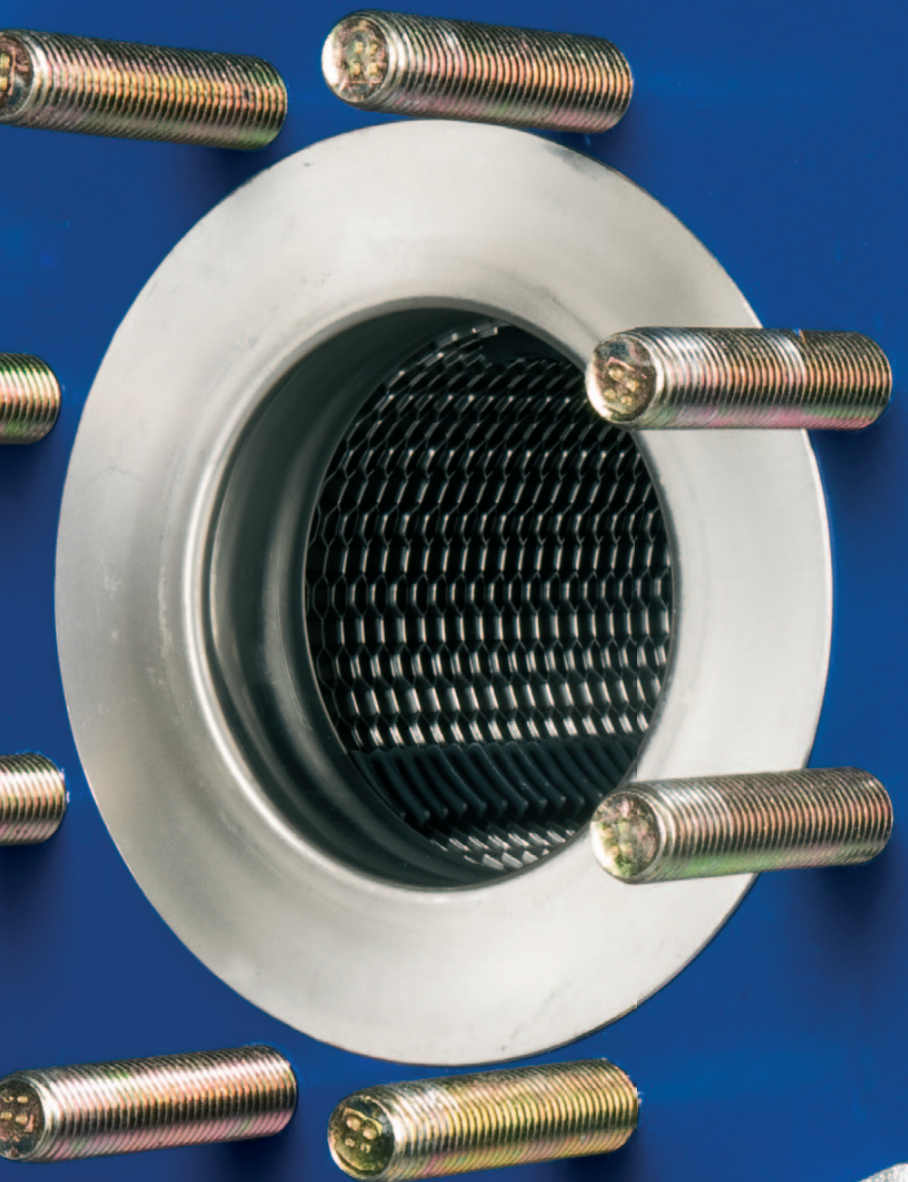
And one way or another, that ends up costing them money.

Alfa Laval's predictive maintenance packages let you take a smarter approach. Working from the inside out, they let you base your decisions on the actual internal condition of your plate heat exchangers.

If performance is acceptable, there's nothing more you need to do. And if performance is on the decline, you can take steps to improve it before it affects your business.

Either way, you ensure optimum heat transfer and help to safeguard your uptime. And either way, you save money in the long run.





S1

# Save your energy

The clear benefit of predictive maintenance is the ability to forecast performance and service needs. When you know the actual internal condition of your plate heat exchangers, you can make the decision as to when to stop and why.

The cost of analyzing your plate heat exchangers is thus outweighed by any number of factors. On the one hand, you avoid the expense of performing routine maintenance when it isn't needed. On the other hand, you safeguard your profits with regard to:

- Energy consumption
- Heat recovery
- Production capacity
- Product quality
- Media longevity
- Environmental factors

By evaluating potential energy losses and your local energy costs, you can calculate real savings with a single plate heat exchanger analysis.

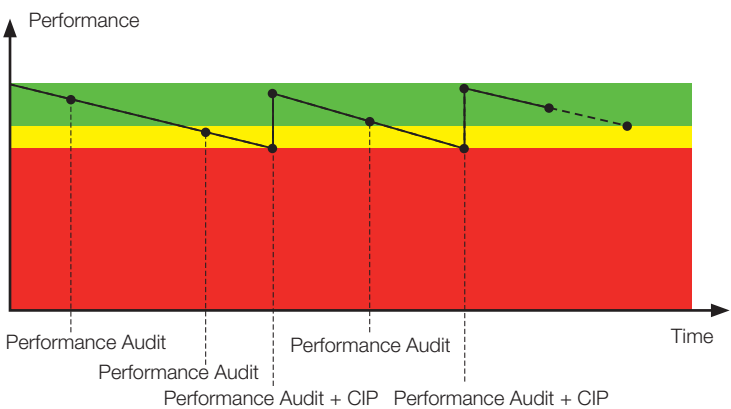
And that's on top of the worry saved when it comes to unplanned downtime.



# The means to detect

Alfa Laval can see inside your plate heat exchangers with the help of Alfa Laval Performance Audit PHE, a unique combination of monitoring hardware and analysis software that builds on Alfa Laval's many years of thermal expertise. With the plate heat exchanger closed, Performance Audit analyzes performance to detect fouling while the unit is still in operation.

This lets you maximize uptime by planning your operation stops.



When Performance Audit is used, an Alfa Laval engineer mounts temperature gauges and a flow meter near the inlets and outlets of your plate heat exchanger. The accumulated data is then reviewed by our software to produce a thermal performance graph and trend analysis.

Using the easy, colour-coded indications, you can choose the optimal time for Cleaning In Place (CIP) or HydroBlast cleaning.



# The means to protect

When a maintenance need arises, Alfa Laval can provide Cleaning Services that restore optimal plate heat exchanger performance and thereby safeguard your uptime.

## Cleaning In Place (CIP)

Alfa Laval's CIP equipment and environmentally friendly CIP chemicals let you perform on-site maintenance without opening your plate heat exchangers. Connected to the heat exchanger inlets and outlets, our CIP units circulate a biodegradable solution that removes any scaling without damaging plates or gaskets.

Our CIP units are available in a range of standard sizes with reversible flow capability, and can be used on welded and brazed plate heat exchangers as well as gasketed models.

## HydroBlast cleaning

Another option for restoring plate heat exchanger performance is HydroBlast cleaning. This involves opening the unit and washing the plates with high-pressure water jets, which is a quick and effective way to remove fouling.



# Predictive maintenance packages

Alfa Laval's predictive maintenance solutions have been rigorously tested and widely employed, which means their ability to reduce risk is well documented. And since our services are organized into two convenient packages, it's a simple matter to safeguard your uptime.

Whichever package you choose, your needs and application decide the number of plate heat exchanger analyses and the maintenance solutions involved. We make a suggestion based on Alfa Laval's years of experience, but you determine the service options – with no obligation to purchase more.

## Inside Information

Our Inside Information package reveals the exact internal condition of your plate heat exchangers, but leaves you free to use the data as you see fit. You agree with Alfa Laval on a certain number of Performance Audit measurements, but no terms of maintenance are specified in the contract.

If you then decide to perform maintenance based on the Performance Audit results, Alfa Laval is available with solutions for plate heat exchanger cleaning and the market's best reconditioning packages.

## Inside Protection

Our Inside Protection package gives you both the knowledge and tools to protect your uptime. In addition to contracting for a number of Performance Audit measurements, you agree to some form of Alfa Laval assistance when it comes to maintenance.

One option is to rent Alfa Laval equipment for Cleaning In Place (CIP) and let us supply the appropriate chemicals when needed. Alfa Laval has over thirty years of CIP experience, which means you can be certain of premium results.

Another option is to contract for HydroBlast cleaning as needed. This cleaning service is performed on your premises by an Alfa Laval representative.

Naturally, CIP and HydroBlast cleaning can be combined in the manner that best suits your needs.

## Alfa Laval in brief

Alfa Laval is a leading global provider of specialized products and engineered solutions.

Our equipment, systems and services are dedicated to helping customers to 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

Contact details for all countries are continually updated on our website. Please visit [www.alfalaval.com](http://www.alfalaval.com) to access the information.



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