

A large, industrial heat exchanger, likely a shell-and-tube type, is shown in a dramatic, low-angle shot. The heat exchanger is dark, possibly black or dark blue, and is illuminated by a strong red light from the bottom right, creating a high-contrast, almost fiery effect. The background is a deep blue, suggesting a night sky or a large industrial facility. The heat exchanger's cylindrical body and various flanges and pipes are visible, emphasizing its complex and robust design.

Welcome to a world
of sustainable performance

Alfa Laval Packinox heat exchangers

Product range



Packinox plate-and-shell

A Packinox plate-and-shell heat exchanger combines the benefits of plate heat exchangers and shell-and-tubes. The heat transfer takes place in a fully welded plate pack, ensuring maximum heat transfer efficiency and a low pressure drop. The plate pack is enclosed in a pressure shell, which enables operation with very high pressures.

The exceptional heat transfer efficiency means a single Packinox heat exchanger outperforms systems consisting of multiple large shell-and-tubes, both in terms of heat recovery and investment costs. Due to its many advantages, Packinox plate-and-shell has become the preferred choice in a number of demanding applications, for example catalytic reforming and aromatics production.



Packinox plate-and-frame

In a Packinox plate-and-frame heat exchanger, the plate pack is supported by panels held together by a large number of tie rods. Packinox plate-and-frame is suitable for duties with high flow rates and long temperature programmes and where very high pressure resistance is not required. Thanks to the high thermal efficiency and low CAPEX, Packinox plate-and-frame units are becoming increasingly popular in applications such as carbon capture, use and storage (CCUS), long-duration energy storage (LDES), and petrochemicals production.

Packinox+

Packinox+ heat exchangers, featuring Alfa Laval's new FlexFlow technology, are the optimal solution for highly asymmetric duties where flows rates differ greatly, for example liquid-to-gas and gas-to-gas duties.

Packinox+ is available in both plate-and-shell and plate-and-frame configurations.



Reliable efficiency

An Alfa Laval Packinox heat exchanger is the perfect choice for demanding, large-scale heat transfer duties with long temperature programmes, high pressures and temperatures.

Combining exceptional heat transfer efficiency, minimal pressure drop and low CAPEX, Packinox heat exchangers help you optimize process efficiency, save energy, increase profitability and improve sustainability by reducing CO₂ emissions.

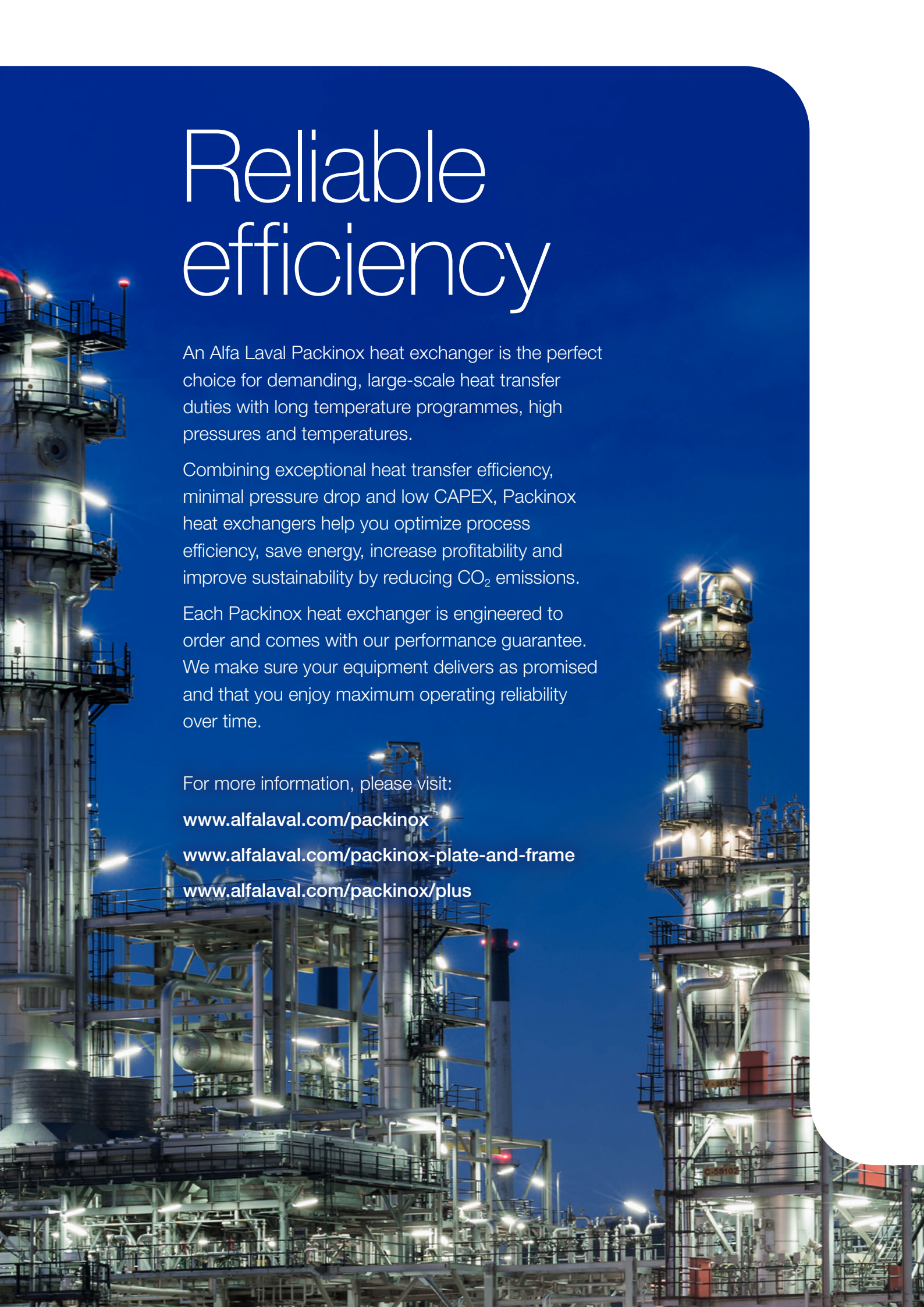
Each Packinox heat exchanger is engineered to order and comes with our performance guarantee. We make sure your equipment delivers as promised and that you enjoy maximum operating reliability over time.

For more information, please visit:

www.alfalaval.com/packinox

www.alfalaval.com/packinox-plate-and-frame

www.alfalaval.com/packinox/plus



Unique features

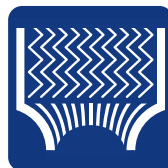
The outstanding performance in a Packinox heat exchangers is the result of a range of innovative features.



Explosion Forming

High-strength plates with long, reliable lifetime

The pattern on a Packinox heat transfer plate is formed by the shockwave from an underwater explosion. This one-step operation minimizes residual stresses in the plates, making them mechanically stronger. The end result is very high operating reliability and longevity.



HyperCut

Unique plate design that increases reliability and reduces pressure drop

The design of our patented HyperCut plates increases the mechanical robustness and operating reliability of your Packinox heat exchanger, reduces the pressure drop over the distribution areas, and improves operability. This makes it possible to maximize heat recovery, and in turn minimize size and CAPEX, or to reduce the overall pressure drop.



FlexFlow

Maximal performance with asymmetric flows

The flow geometries of the different fluid streams in an Alfa Laval Packinox+ heat exchanger can be individually optimized to ensure both superior heat transfer and an optimized pressure drop when handling highly asymmetric flows. FlexFlow also brings new opportunities when a very low pressure drop is required for one or more of the fluid streams. Available in Packinox+ heat exchangers.



ALOnline

Digital services for maximum uptime and performance

We offer a range of digital services for our Packinox heat exchangers, including process optimization, condition monitoring and predictive maintenance through Packinox Performa, as well as remote guidance and support from our experts via video link.



Spray Bar

Effective mixing of the liquid feed and the recycle gas

Internal mixing of the liquid feed and recycle gas in applications such as catalytic reforming and aromatics production is unique for Packinox heat exchangers. Our patented Spray Bar technology ensures perfect mixing, resulting in better heat transfer, less mechanical stress and more reliable operation compared to mixing in the inlet pipe. Available in all plate-and-shell models.



ALOnsite™

Qualified support at your facility

With Alfa Laval as your partner, you have the full backing of our global service network. You have 24/7 remote technical support, and we can be at your plant within a day or two in case you need onsite assistance.



Service offer

Alfa Laval offers a complete portfolio of services for your Packinox heat exchanger. As its original manufacturer, we know exactly how to maintain your Packinox unit to ensure high and reliable performance over time while maximizing long-term yield and ROI. Our services include:

- Condition monitoring and predictive maintenance
- Performance optimization
- Troubleshooting
- Maintenance, cleaning, and repairs
- Upgrades
- Training programmes (service, maintenance, operation)
- Genuine spare parts supply

Learn more about our services on our web site:

www.alfalaval.com/packinox/service

Service Agreements

An Alfa Laval Service Agreement is a fully customized service solution for your Packinox heat exchanger, covering everything you need to ensure high performance and uptime.

It can include any of our services and our team handles all planning and parts procurement. All service interventions are scheduled long in advance and in agreement with you to ensure your production is not disturbed.

Packinox Performa

Packinox Performa is a unique solution that gives you full insight into the condition of your Packinox heat exchanger by providing condition analyses and performance predictions. It continuously collects and analyses data from your Packinox heat exchanger and sends weekly reports on the status of your unit in terms of fouling, mechanical integrity, thermal and hydraulic performance. If Performa detects any deviations, it also recommends appropriate actions.

Discover the benefits of Packinox Performa on our web site:

www.alfalaval.com/packinox/service





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

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com