



For tough duties in industrial processes



AlfaNova heat exchangers are ideal for many different applications. The gasket-free solution makes it possible to use AlfaNova in an organic solvent/solvent interchanger where the medium is too aggressive for gaskets. It can also be used as a heater or cooler when the temperature is too high or too low for gaskets. Additionally, AlfaNova can be used as a gas heater, gas cooler, condenser or reboiler.



- Preheating of boiler water
- Thermal oil coolers
- Biodiesel product cooler
- Condensing of organics from air
- Lube oil coolers
- Heat recycling from oil to hot water
- TEG/TEG interchanger
- Acetone heat recovery
- Cooling of propylene glycol using liquid nitrogen



AlfaNova – the obvious choice

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

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

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The obvious choice

AlfaNova™ – fusion-bonded plate heat exchangers for the process industry



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100% muscle



Aggressive media, high temperatures and pressures are everyday conditions for heat exchangers in industrial processes.

Extreme conditions demand extreme technology. Produced by the patented AlfaFusion bonding process, AlfaNova™ is the world's first 100% stainless steel plate heat exchanger.

With its high mechanical strength and no gaskets, the compact AlfaNova is the obvious choice for tough applications in the process industries. It can handle aggressive media and temperatures from -196°C up to 550°C (-320.8°F up to 1022°F), and is capable of working with approach temperatures down to $1-2^{\circ}\text{C}$.

AlfaNova will save money in your plant by ensuring maximum heat recovery from your process, thus reducing the amount of heating and/or cooling media required.

AlfaNova is far more efficient and occupies only a fraction of the floor space of a comparable shell-and-tube unit. So you have a lower initial investment in a unit that occupies less valuable space in your plant.

AlfaNova – the obvious choice



It's obvious! You no longer need to install a bulky shell-and-tube heat exchanger to handle the duty in your industrial processes. There is a compact AlfaNova that can handle the job, and save you money by enabling you to achieve maximum heat recovery.



High performance, superior strength, compact design

Manufactured in 100% stainless steel, AlfaNova is a high-performance, cost-efficient plate heat exchanger designed to handle demanding duties in a broad spectrum of industrial applications and utilities. It is available in a wide range of sizes.

Patented by Alfa Laval, AlfaFusion is a one-material process where Alloy 316 stainless steel corrugated plates are bonded in a high temperature furnace using stainless steel filler as the activator.

The muscle you need in a compact package

AlfaNova offers an unmatched ratio of price to performance and performance to size. The unique pattern of the corrugated plates provides optimum heat transfer with approach temperatures down to $1-2^{\circ}\text{C}$ and low hold-up volumes.

Superior mechanical strength

AlfaNova's 100% stainless steel and gasket-free design ensures high mechanical strength. AlfaNova can withstand temperatures from -196°C up to 550°C (-320.8°F up to 1022°F), and pressures

up to 30 barg. Available in a wide range of sizes and capacities, AlfaNova is suitable for duties in almost any industrial process.

Simple to maintain

AlfaNova is a sealed unit. Due to its small hold-up volume, compared to a shell-and-tube unit, it is easily cleaned by flushing, using an Alfa Laval Cleaning-in-Place (CIP) system. The time-consuming task of opening a shell-and-tube heat exchanger is thus avoided. Just hook up and switch on.

Cleaning with a CIP unit is a cost-effective way to achieve better performance. The environmentally friendly cleaning agents used extend AlfaNova's operating time between cleaning cycles, prolonging the lifetime of the heat exchanger, without damaging the plates.



AlfaNova fusion-bonded plate heat exchangers are available in a wide range of sizes and capacities. Let us help you choose the right model for your application.

It's often possible to replace large, heavy heat exchangers

Replace your large shell-and-tube heat exchanger with an AlfaNova heat exchanger. It will save you money by ensuring maximum heat recovery from your industrial process, while reducing the amount of cooling and heating media required.

Much more compact than shell-and-tube units

The compact AlfaNova occupies much less floor space than a comparable shell-and-tube heat exchanger. Shell-and-tube units are big, bulky and much less efficient.

The corrugated stainless steel plates in AlfaNova ensure high turbulence. This reduces fouling and results in up to five times higher heat transfer coefficient than a comparable shell-and-tube unit, and thus a lower investment cost.

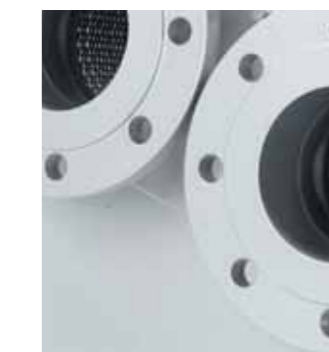
AlfaNova is capable of handling crossing temperatures, and has 80–90% less hold-up volume than a shell-and-tube heat exchanger, ensuring a quick response.

Shell-and-tube units require frequent, labour intensive maintenance, while AlfaNova can easily be cleaned in place.

When to choose AlfaNova

For a wide range of duties, AlfaNova is the best, most cost-efficient solution on

the market today. When your application demands a gasket-free solution, depending on media or temperature, AlfaNova is often the best choice. Possessing similar characteristics to Alfa Laval all-welded plate heat exchangers, AlfaNova is the perfect complement to Alfa Laval's heat exchanger portfolio.



AlfaNova characteristics	
Design temperature	From -196°C (-320.8°F) and up to 550°C (1022°F)
Design pressure	From full vacuum and up to 30 barg (435 psig)
Lowest achievable temperature difference	$1-2^{\circ}\text{C}$
Performance	Low to high thermal length or NTU duty