It's a fact

How can you reduce energy costs and CO_2 emissions in your plant?

It's a fact that...

If you use less energy in your processes, you cut your operating costs and reduce CO_2 emissions.

If you recover more of the heat you generate, you use less energy.

With a closer temperature approach between the hot and cold media in your heat exchangers, you can recover more heat.

The combination of high internal turbulence and counter-current flow in a compact heat exchanger enables a closer temperature approach in less space.

These are simple facts.

Example: A large Canadian refinery recovered 13.5 MW by preheating boiler feedwater by condensing the fluid catalytic cracking (FCC) overhead vapours. The existing shell-and-tube installation was replaced with eight compact heat exchangers from Alfa Laval. The new condensers are made of Hastelloy C276®, a material that completely eliminates the corrosion problems previously encountered. Annual fuel costs were reduced by USD 1.4 million and CO_2 emissions were reduced by 10,000 tons per annum.

How can you increase uptime in your plant?

It's a fact that...

You increase profit and cut costs by minimizing downtime.

You can reduce downtime if you clean your equipment less frequently.

Less fouling in your heat exchangers, means you reduce your cleaning needs.

Higher turbulence in your heat exchangers reduces the fouling rate.

Compact heat exchangers create a high degree of turbulence in the media.

The ease of access and simple, effective cleaning process for compact heat exchangers reduce downtime even more.

These are simple facts.

Example: On the production platform of a French gas producer, in the gas dehydration package, shell-and-tube interchangers for lean and rich glycol needed replacing, and the company decided to replace them with all-welded compact heat exchangers from Alfa Laval. Downtime in conjunction with cleaning has been significantly reduced on the platform, and maintenance takes half a day, compared with the three days previously required to service the shell-and-tube units. Installing new tube bundles in two shell-and-tubes would have cost three times as much as one new compact heat exchanger, including installation.

How can you reduce heat transfer costs in your plant?

It's a fact that...

You can cut costs if you free up plant space, spend less on equipment and installation, and consume less cleaning fluid.

The extreme compactness of compact heat exchangers gives you the same or higher capacity in a fraction of the floor space.

Compact heat exchangers can be installed with less piping and smaller supporting structures.

In corrosion-resistant material, compact heat exchangers cost less than shell-and-tube heat exchangers because they contain less material.

The plate corrugation and low hold-up volume of compact heat exchangers makes cleaning more efficient and reduces the consumption of cleaning fluids.

These are simple facts.

Example: An Asian petrochemical company wanted to increase capacity for the production of benzene and toluene. Using shell-and-tube heat exchangers would have required four larger units and more than 5,000 m^2 of heat transfer area. Alfa Laval's solution was three compact heat exchangers in parallel requiring a heat transfer area of only 950 m^2.

How can you secure process stability and your own peace of mind?

It's a fact that...

You ensure stable processes by choosing an equipment supplier with extensive process knowledge, reliable products, skilled service personnel, flexible service agreements and advanced diagnostics.

Alfa Laval's compact heat exchangers are among the most reliable in the world.

Alfa Laval's compact heat exchangers come with a choice of performance agreements on four different levels.

Alfa Laval can equip its compact heat exchangers with a condition monitoring system to ensure that you perform service at the correct time.

Alfa Laval has more than 50 service centers worldwide, manned by dedicated service personnel, as well as a dedicated team of field service engineers.

These are simple facts.

Example: A Swedish bitumen refinery replaced its shell-and-tubes with 14 compact heat exchangers from Alfa Laval. The shell-and-tubes needed a week of cleaning, once a year, at a cost of EUR 10,000 per unit. By contrast, all but one of the compact heat exchangers are cleaned once every three years. This takes less than a day and costs EUR 1,000. Only the bitumen interchanger needs to be opened and hydroblasted every year. Cleaning downtime has been reduced by 90% and total maintenance costs are 96% lower.

Compabloc 120 and Alfa Laval offer all this and much more

It's a fact that...

The new Compabloc 120 all-welded compact heat exchanger helps you to use less energy, reduce emissions, maximize uptime, minimize heat transfer costs and secure nonstop performance.

Compabloc is a well-proven design offering excellent performance compared to shell-and-tube heat exchangers. Several thousand Compablocs are installed in plants throughout the world.

Compabloc 120 is suitable as a heater, cooler, interchanger, condenser or reboiler. It can replace one, or several, large shell-and-tube heat exchangers for duties up to 42 barg.

Compabloc 120 provides high turbulence in the media and close temperature approach. The unit enables recovery of a large amount of heat and is highly resistant to fouling.

Compabloc 120 can be opened and cleaned easily by hydroblasting, or by using a Cleaning-in-Place (CIP) equipment and detergents.

Alfa Laval is dedicated to helping you maximize uptime in your plant. Wherever you are in the world, we have the resources to provide you with technical assistance, service and spare parts.

Your bottom line and peace of mind are our priority – and that's a fact.

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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