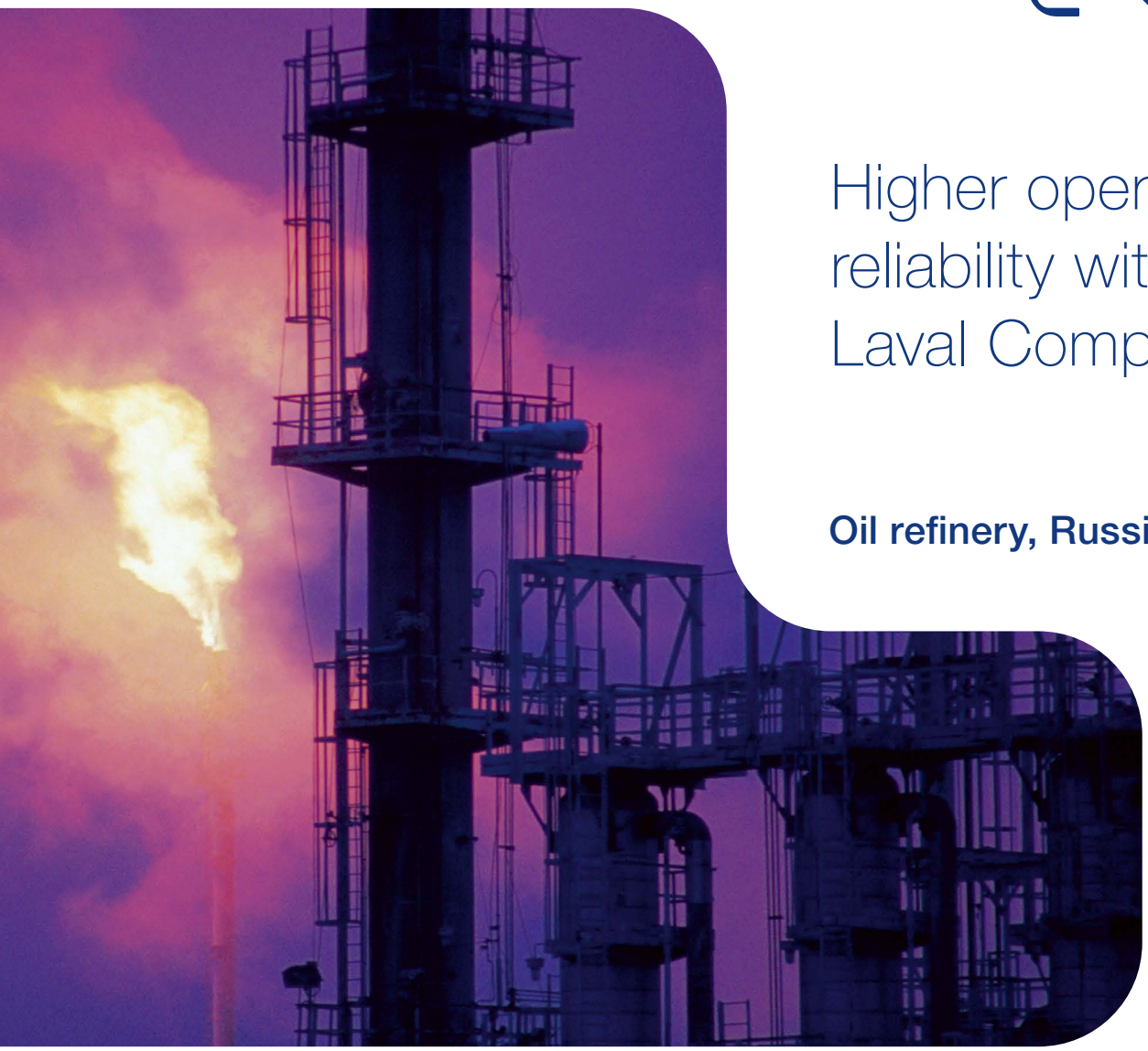

Higher operating reliability with Alfa Laval Compabloc

Oil refinery, Russia

Better customer service and more reliable uptime are the main reasons why a Russian oil and gas company are replacing the heat exchangers in the crude preheat train in one of its refineries with Alfa Laval Compablocs. The plan is to replace 3–4 of the existing heat exchangers every year until all 20 positions have been upgraded.

Higher energy efficiency with plate heat exchangers

The refinery is located in western Siberia and is one of the largest in the world. The plant's management team has a strong tradition of continuously improving plant operations and finding new ways to cut operating costs.

In order to increase the plant's energy efficiency, the heat exchangers in the crude preheat train of the distillation unit had been replaced with welded plate heat exchangers from one of Alfa Laval's competitors.

Problems with leaks and bad service

Unfortunately, the heat exchangers were not optimal for the task and, after just six years of operation, they started to leak due to corrosion.

The plant engineers sought assistance from the manufacturer but did not receive any qualified help. In the end, the plant's service personnel and engineers had to try to solve the problem on their own.

Realizing that the number of leaks would probably

escalate over time and that the supplier would not offer any assistance, the company decided to replace all heat exchangers in the preheat train.

Designed for tough refinery duties

The plant's engineering team contacted Alfa Laval to discuss a possible solution. After analysing the situation, Alfa Laval's refinery experts recommended that the customer replace the existing heat exchangers with Alfa Laval Compablocs.

Alfa Laval Compabloc heat exchangers are installed in a large number of crude preheat trains around the world and are very well suited for handling heavy oil products.

The unique plate design and butt-to-butt weld joints ensure there are no crevices or dead zones where corrosion can start. The special plate pattern facilitates both chemical and water jet cleaning. After removing the side panels, a Compabloc can be 100% mechanically cleaned, resulting in fully restored performance.

The Alfa Laval team also advised on suitable cleaning procedures and chemicals that maximize long-term operating reliability.

Customized measurements

The customer required the new heat exchangers to have the exact same measurements as the existing ones to avoid unnecessary costs for altering the piping and support structures. Alfa Laval fulfilled these requirements, making it very easy for the customer to install the new units.

Strong local presence

Based on the experiences from the previous supplier, the customer recognises the significance of good customer service.

Alfa Laval's global service network reaches more than 160 countries and has a strong presence in Russia. A network of field service technicians is ready to assist on site, and a local Alfa Laval Service Centre is also available for more advanced services.

The customer is very satisfied with the support from Alfa Laval so far and is looking forward to working together over the coming years as the old heat exchangers are being replaced.

Fast facts

The plant

A refinery in western Siberia.

The challenge

To increase the operating reliability of the heat exchangers in the crude preheat train.

The solution

Replace the existing heat exchangers with Alfa Laval Compablocs.

The benefits

- Higher operating reliability.
- Much better access to qualified service.

SmartClean
Fast and efficient flushing of fouling material

C-Weld
Superior cleaning and extended performance

XCore
Advanced design for higher pressures

ALOnsite
Qualified support at your facility

Learn more about Alfa Laval Compabloc heat exchangers and Alfa Laval's solutions for the refinery industry at:
www.alfalaval.com/compabloc and
www.alfalaval.com/refinery