

Heat Exchanger Bundle Upgrade

A high-pressure heat exchanger in the Client's processing unit had experienced significant tube-bundle pitting corrosion during a decade in service. The Client was also concerned about the potential for leakage at the channel closure diaphragm seal. Rally performed a scoping study to identify potential solutions to the corrosion issues. A new tube bundle and channel assembly was then specified and procured, altering the closure to a more reliable Kammprofile gasket design.



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Saskatchewan

Refining & Petrochemicals

\$1M TIC



SCOPE OF WORK

Rally discussed the unit heat exchangers with the Client to fully understand their previous issues and explore potential alterations. The team decided that converting the closure to a Kammprofile gasket-type design was the best way to eliminate the problematic diaphragm seal.

Rally worked with the Client's preferred supplier to ensure that the new channel / bundle assembly would be 100% compatible with the existing exchanger shell, and fully compliant with modern pressure equipment codes.

3D modeling helped the team to visualize construction work, minimizing the removal of adjacent piping and structures.

DELIVERABLES

A material requisition was developed for a new tube bundle and channel assembly; it contained all the specifications for design, metallurgy, fabrication, and shop inspection.

Rally arranged for the new Kammprofile gasketed channel cover to be installed and pre-tensioned prior to shipping. This saved the Client valuable time during the plant turnaround.

