

Naphtha Export Pump Replacement

The Client's original naphtha export pump was a single-seal centrifugal pump that had been in service for 45 years. Criticality assessments revealed that the pump was undersized for the Client's desired flow rate, and the single mechanical seal was vulnerable to a high-consequence failure. Rally was asked to provide multi-discipline engineering and design services to replace the pump with a new, larger, more technically advanced pump.

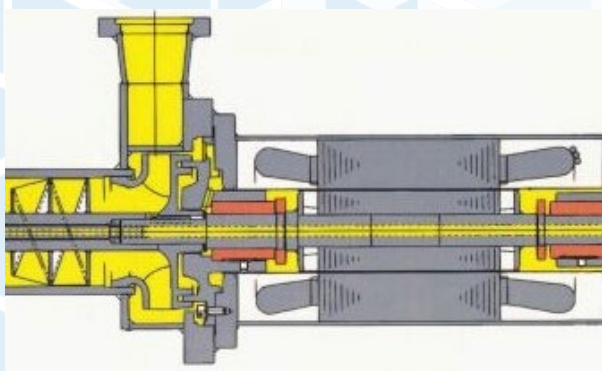


Naphtha Export Pump Replacement

Alberta

Refining & Petrochemicals

\$1.6M TIC



SCOPE

The goal was to install a new pump that would mitigate the safety & reliability risks associated with a single seal failure, while also increasing capacity by 50%. The project team elected to purchase an API 685 seal-less (canned motor) pump, using engineering design to eliminate the possibility of seal failure. The team also repurposed an abandoned pump foundation, saving the project money and allowing the new pump to be installed off-line.

DELIVERABLES

Rally produced the material requisition (MR) for two new seal-less pumps – one for installation, and one for a warehouse spare. In the unlikely event of a pump breakdown, the unitized pump and motor assembly can be changed out in one 8-hour shift.

Rally also procured new instrumentation including a flow meter, a flow control valve, pressure safety valves, motor operated valves, and various gauges and transmitters.

The piping tie-ins, electrical and instrumentation terminations, and new pump commissioning all took place in a 6 day outage.