PR() services

An ITT Brand

Case Study

Custom Replacement Pump Improves Oil Refinery Capacity

A refinery located in Oklahoma, USA requested that the PRO Services' Aftermarket team review a capacity constrain they had with an obsolete pump which was installed the 1950's. The pump was too small for today's operations and it was no longer able to meet the new process requirements.

The Situation

A change in the refinery process was made many years after the original pump was first installed. The new process meant the distribution line needed greater pressure and capacity. They also needed a new pump to meet the new performance demands. However, site space limitations meant that changing both the existing pipework and foundation would be difficult, time consuming and costly.

PRO Services' Solution

Using a proven, existing pump design from Goulds Pumps' extensive product range, the casing configuration was modified to meet the termination points of the existing pipework and fit onto the existing baseplate.



Original pump installation



Custom casing design

The hydraulic performance implications of altering the existing pump design to meet the site terminations was thoroughly assessed using Gould's design processes and tools.

The custom pump allowed the refinery to increase capacity with zero disruption to the existing site installation, saving time and expense on costly pipework and foundation modifications. In addition, the new pump, designed specifically for the operating requirements has reduced maintenance spend and increased efficiency, culminating in a positive impact on refinery profitability.

PRO Services' Impact

The end result - the refinery distribution line's pressure and capacity were increased without any site modifications to accommodate this solution.

PRO Services®

PRO Services is a sister brand of Goulds Pumps. Building on 170+ years of Goulds Pumps experience, PRO Services provides replacement parts, repair and upgrade services and maintenance programs to customers with the goals of extending equipment life and reducing Total Cost of Ownership.

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