Transfer Line Stress Analysis

This project was to modify the spring cans arrangement for the transfer line between the primary reformer and secondary reformer. Structural modifications would be needed to allow for a different spring can arrangement.





Transfer Line Stress Analysis

Alberta
Refining & Petrochemicals
\$585k TIC





SCOPE OF WORK

The objective of this project was to complete a stress analysis on the piping system, resize the spring-can supports and modify the support style and bridge structures that hold it. The stress in the piping system could not be reduced to a satisfactory level using the existing infrastructure. The project was expanded to include the design of 5 new support structures and the review of loading on the structure for the vertical support.

DELIVERABLES

The proposed solution by the client was to replace the existing 2 spring can setup with only 1 spring can at each location aligned with the centerline of the pipe. Rally delivered a solution of using constant effort supports for the three on the bottom and a triple spring on one side.

Additional scope included: reviewing geotechnical information and underground drawings. Assessment/potential modification of the existing vertical support, new drawings for 5 new support structures.

