

OUR EXPERT FINDS THE CAUSE OF A HEAT EXCHANGER LEAK IN A SOUR GAS PLANT & RECOMMENDS CHANGES FOR IMPROVED OPERATIONS THAT INCREASE PRODUCTION

THE CHALLENGE

The customer in the Rocky Mountain foothills, recently took over a sour gas plant that has been operational for decades. The staff at the plant had completed scheduled maintenance on a pair of redundant heat exchangers, which had appeared to be running trouble-free for years. Considering this, the customer was concerned that one of the heat exchangers had leaked within 1 month of maintenance start-up. As a result, they contacted our heat exchanger expert to get to the root of the problem.

THE SOLUTION

Our **spray** application expert called the customer to fact-find and schedule a site visit to inspect the malfunctioning heat exchanger. After the visit, the unit was removed from site and taken to the service center for a thorough inspection. After the site visit and inspection, our expert compiled a report and met with the customer to discuss the findings. The heat exchanger had suffered a plate pack shift initiated by fluid flow and operating procedures during an extreme cold snap. While discussing the findings with the plant process engineer and operations staff, it was determined that plant piping was not balanced between the two redundant heat exchangers. Operations also revealed the unit that failed had been troublesome over the years and they were always more cautious with it during start-up. Our Experts' investigation led to a broader discussion with Engineering and Operations staff leading to not only improved operations and maintenance at the plant, but to a design review of piping layout. The customer made the recommended changes and sees us as a trusted technical partner and solution provider, and continues to work with us today.

THE RESULTS

- ▶ Increased Productivity & Efficiency
- ▶ Decreased Downtime
- ▶ Decreased Maintenance Costs

For more information on this solution or if you have a fluid handling challenge of your own - Contact a John Brooks Company Application Expert today!



SOUR GAS | HEAT EXCHANGE ON LEAN/RICH AMINE

OUR EXPERT SOLVES A CRITICAL HEAT EXCHANGER PROBLEM & ASSIST WITH REWRITING PROCEDURES TO IMPROVE PLANT PIPING & OPERATIONS

SCHEDULE AN ON-SITE AUDIT WITH AN EXPERT

Our Experts are available to conduct an on-site audit of your plant and equipment in order to identify areas where upgrades or replacements can further lower your cost of ownership by improving efficiency and reducing your operating and maintenance expenses.

HOW PLATE & FRAME HEAT EXCHANGERS WORK

- ⦿ Plate and Frame Heat Exchangers are an extremely Green technology. There are no moving parts or added energy needed in order to capture and reuse existing heat.
- ⦿ Heat Exchangers are used to pre-heat fluids, or capture waste heat and save operations money on expensive heating costs.
- ⦿ Thermal fluids pass each other in a counter-current direction, separated by a metal plate with corrugations which cause turbulent flow. Each heat exchanger is specifically sized for optimal turbulence for the specific process to efficiently exchange the heat from the hot fluid to the cool fluid to within one degree of difference.