Steam Trap Survey Reduces Plant Energy Costs

RESULTS

• Optimized plant performance by reducing steam loss
• Annual energy cost savings of $960K

APPLICATION

Steam Traps

CUSTOMER

A large petrochemical complex in the Middle East.

CHALLENGE

The plant had several undetected failures in its large steam trap population. This resulted in significant steam loss and increased energy costs. The failed traps had to be identified and replaced but the plant did not have the resources required to address these issues.

SOLUTION

Emerson and one of our partners in the Middle East conducted a survey of the 2500 steam traps installed at the site. A steam trap survey involves manually checking each steam trap to ensure proper operation. The steam traps are typically checked with a thermographic camera, an ultrasonic probe or other steam trap testing tools. Customers are given a detailed report documenting the key findings and recommendations from the survey.

The Emerson team discovered that almost half of the steam trap population at this plant were either not functioning properly or leaking. This was the underlying cause of the significant steam loss which ultimately increased the plant energy costs. Emerson recommended replacements for the 1200 failed traps and all the new units were delivered and installed within the customer’s desired timeframe. The new steam traps improved plant performance and resulted in approximately $960K of annual energy cost savings due to reduced steam loss.

RESOURCES

Steam Trap Selection Guide
Steam Trap Monitoring Proven Results