

Boosting Power Plant Efficiency Through Steam Trap Optimization

RESULTS

- Saved megawatts capacity due to mitigation of steam loss caused by failed steam traps
- Extended steam trap service life for demanding steam lines
- Optimized steam trap inspection and maintenance

APPLICATION

Steam traps in main steam line drip legs.

CUSTOMER

Large power plant in Southeast Asia.

CHALLENGE

The customer is actively exploring opportunities to reduce overall megawatt consumption across the plant. One key focus area identified is steam loss resulting from malfunctioning or failed steam traps.

To address this, the customer is seeking a reliable partner with strong technical expertise in steam trap condition assessment. The objective is to accurately identify critical drain pots that require prioritized attention and implement a structured maintenance strategy to improve system efficiency and minimize energy losses.



A comprehensive steam trap management program enabled identification and replacement of faulty traps, resulting in significant energy savings.



Yarway™ Thermodynamic Steam Traps

SOLUTION

Steam Trap Audit

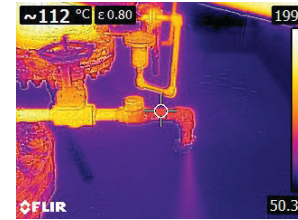
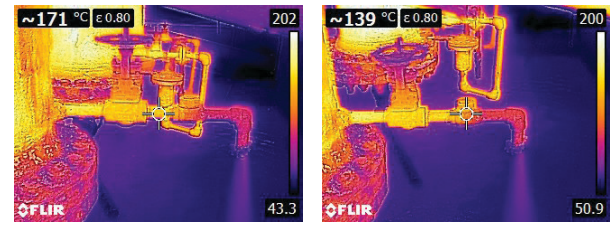
Emerson, in partnership with its regional local business partner, collaborated closely with the customer to initiate a comprehensive steam trap audit. The assessment identified and quantified steam traps that were either blowing or blocked, providing critical insight into system inefficiencies.

Improving Reliability

Unattended blowing steam traps can result in significant energy losses, potentially equating to megawatts of steam loss per day from a single drain pot. Leveraging strong technical expertise and proactive customer engagement, this initiative created an opportunity to introduce Emerson's Yarway™ Thermodynamic Steam Traps at the site, offering a more reliable and efficient solution.

Dedicated Stocking Program

To further support this effort, Emerson's local business partner implemented a dedicated stocking program for Yarway Thermodynamic Steam Traps. This ensures rapid replacement and minimizes downtime by enabling quick changeout of failed steam traps on-site, thereby enhancing operational efficiency and reducing energy losses.



*Thermal Profiling of a
Thermodynamic Steam Trap*

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