

## Case Study: **Steam Traps**

# SENERGY Consultants (P) Ltd

### **Background:**

While conducting energy audit at a bulk drug company, quite a few steam traps were observed to be malfunctioning.

### **Operating Scenario:**

The performance of the steam trap was analyzed with the help of

- Ultrasonic steam trap tester
- Thermal imaging camera
- Physical inspection

The major concerns / issues with the traps included

- Improper location of the type
- Failure of traps due to carry over of scales through interconnecting cooling water circuit

### **Energy Conservation Measures:**

The small & no investment measures were implemented during the first stage; which included

- Installing the traps at appropriate locations
- Providing suitable strainers before the traps
- Preparing and following the predictive / preventive maintenance schedule

The second step involved incorporating investment oriented suggestions (typically having a payback period of up to 12 months); which included.

- Improving quality of cooling water
- Incorporating automatic control to minimize mixing of cooling water with condensate pipe line

### **Outcome:**

- The first step resulted in 7.5% saving in the boiler fuel consumption
- The second step resulted in an additional 5.0% saving in the boiler fuel consumption
- The output from the affected equipments raised by around 20%

SCPL-CS-03

*Helping You to Conserve Resources*

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3, Aastha II, Opposite Lakme Ltd, B K S Devashi Road, Govandi East, Mumbai 400 088, India.

Phone: ++91 22 2555 3297

Email: [senergy@vsnl.com](mailto:senergy@vsnl.com)

Website: <http://www.senergy-india.com>