

## Understanding Steam traps

Photo source: spiraxsarco.com

### About the technology

A steam trap is an automatic valve that prevents or minimizes steam loss on steam-based heating and process systems. Important functions of steam traps include:

1. Removing and filtering out condensate (condensed steam) when it forms
2. Discharging air and other non-condensable gases, while remaining tight against live steam
3. Saving energy by minimizing steam loss and maximizing system efficiency

#### The importance of steam traps

A steam trap removes the condensate which accumulates on the system due to unavoidable radiation and heat transfer between the steam and substance heated. This condensate must be removed to prevent mineral build-up from clogging valves and causing corrosion to the steam system.

Maintaining your steam system by repairing and replacing failed traps can keep your failure rate at less than 5 percent of traps in the system.<sup>1</sup>

#### When to repair or replace steam traps

A steam trap lasts approximately six years if inspected and maintained. When a steam trap fails, it can fail in an open position, wasting the energy embedded into the steam.

If your steam trap has not been routinely inspected or is around six years old, we recommend contacting an HVAC contractor (boiler maintenance experience is recommended) to analyze the existing system for failed traps. Because leaks may not be visible or easily noticed, thermal imaging and ultrasonic testing may be used to determine if the steam trap requires repairs or replacement.

#### Why steam traps?



##### Maximizes efficiency

Minimal steam loss and maximum fuel economy to save energy and money



##### Saves time

Fast heat-up of heat transfer equipment



##### Extends equipment life

Corrosion resistance units that provide dependable service and long equipment life

Between 15 to 30 percent of installed steam traps fail if they do not receive maintenance for three to five years.<sup>2</sup>

<sup>2</sup>energy.gov

### How to participate in energySMART

Receiving energy-efficient equipment rebates through energySMART is easy. Follow these three steps to apply:

#### 1. Verify your eligibility

- You must be a Nicor Gas commercial customer to participate.

#### 2. Select and install a qualifying product

- Install qualifying high-efficiency equipment between January 1, 2019 and December 31, 2019.

#### 3. Apply for your rebate

- Apply within 90 days of installation or by January 31, 2020, whichever comes first, to receive your rebate.
- Download a paper application or apply online by visiting [nicorgasrebates.com/apply](http://nicorgasrebates.com/apply). Once your application is approved, you will receive your rebate check in approximately six to eight weeks.
- You can also work with one of our Contractor Circle members who can offer an instant discount on your invoice instead of applying for a rebate. Visit [nicorgasrebates.com/findacontractor](http://nicorgasrebates.com/findacontractor)



#### Rebate eligibility requirements

- Steam trap repairs and replacements must be completed/installed on an existing commercial or multi-family system. Rebates are paid per steam trap and will not exceed the cost of the repair/replacement.
- Orifice- and venturi-type steam traps are not eligible for steam trap rebates.
- New steam traps and repairs/replacements must replace existing steam traps, one-for-one.

Additional requirements apply. View full requirements on the steam trap application, which you can download at [nicorgasrebates.com/apply](http://nicorgasrebates.com/apply).

Visit [nicorgasrebates.com](http://nicorgasrebates.com) or call **877.886.4239** to learn more.