

North American Tire Company Saves Energy, Improves Yield with Emerson™ Steam Trap Connected Services

RESULTS

- Reduced steam usage by 4.1 million lbs. annualized
- \$60K saved in energy the first year with no initial capital investment
- Improved tire yield
- Reduced maintenance
- Improved safety



APPLICATION

Steam Trap Connected Services

CUSTOMER

North American Tire Company

CHALLENGE

A North American Tire Company manufactures 15,000 tires per year with steam presses from the 1950s. Steam trap health is important to the plant to ensure high quality of steam and reduce steam loss. “We had poor steam quality throughout our facility,” said the Maintenance Manager of the plant. “It caused a lot of wear and tear on our equipment, and impacted our plant reliability. We also had significant steam loss from traps that leaked or were stuck open. We were looking for an affordable solution to give us early indication of poor performing traps.”

Manual surveys are difficult and time consuming. It would take two people four days (over a two week period) to complete each survey, and not every trap could be diagnosed. “It is difficult to properly assess all traps during a survey,” he stated. “Some are extremely difficult to get to (like those located in the pits), and cannot be evaluated. Others are inactive due to the natural cycles of our batch process, and are also unassessed.” As a result, time is wasted on trips to the inactive traps, and there is the possibility that some traps go untested for years.

These surveys also present a safety concern, because steam must be present in order to assess the traps. “When live steam is present, there is always a chance to get injured,” said the manager. “This is heightened when you are reaching into an area that is hard to get to. Safety is always a concern for us.”

The plant wanted to have continuous information on trap status as well as weekly reports instead of surveys once or twice per year.

“We saved \$60K in energy costs the first year alone, with another estimated \$60,000 in savings when all the traps receive attention. We have improved tire yield with better quality steam, and improved plant reliability.”

*Maintenance Manager
North American Tire Company*



Manual steam trap monitoring can be difficult, as in the case of the “pits” at the tire plant, and always includes working near live steam.

