

Frequently Asked Questions Steam Trap Management Webinar

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For more information, please contact
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Q: What building Automation system is WMU interfacing with and with what method?

A: Tridium Web Based system with Niagara Products. Kirk Dillery (kirk.dillery@wmich.edu) would be able to answer this question in more detail.

Q: Does WMU's campus use an overall energy management software system?

A: We use a Utility Submetering Software Program and monitor (714) points. The software interfaces with the Powerhouse. SteamStar does not interface with this program. (For complete answer, see 40:19 on the recording)

Q: Of WMU's 4,339 traps, how many use wireless technology?

A: We currently have (11) SteamEye in our Paper Pilot Plant, (7) SteamEye in our Energy Resource Center and (7) Specialized SteamEye installed in (7) Vaults on a Pilot Project. (For complete answer, see 37:57 on recording)

Q: How is the WMU Trap Management Program Funded?

A: Trap Materials are base funded at \$25,000 per year. (For complete answer, see 35:41 on recording)

Q: What have you calculated the annual loss through a 50 psi drip trap to be?

A: With WMU's steam cost, the annual loss would be about \$4,800.

Q: Is WMU's one FTE " trap tester " funded from Physical Plant Maintenance or from the powerhouse, or is it one in the same?

A: He works under WMU's Utility funded costs center just as Greg does. (For complete answer, see 36:04 on recording)

Q: Is there a reason you do not use disc traps? Your trap breakdown only shows thermostatic, Inverted Bucket and Float & Thermostatic?

A: Disc traps do not handle dirt well. Our system is old and dirty. The Inverted bucket is our trap of choice on drip applications. (For complete answer, see 36:31 on recording)

Q: Has WMU tested any venturi style steam traps on campus?

A: No, but we have used orifice traps in the past. We have NOT been pleased with them. Unless you have consistent load, they are either backing up condensate or like a Blow Thru trap. Don't get sold on the orifice trap sales pitch. (For complete answer, see 37:05 on recording)

Q: How did you convince your department manager to get rid of all the orifice traps and fund the installation of bucket traps?

A: It was real easy. Just look at your condensate receiver vent line losses to atmosphere. You know you're losing energy. (For complete answer, see 48:38 on recording)

Q: Can SteamEye give an indication of a trap that is in the process of failing?

A: Yes, some traps as they begin to fail, will cycle through a series of leak to good states for a period of time until it is a full blow thru. SteamEye can bring your attention to this condition before it actually becomes a Blow Thru.

Q: It sounds like all the manual testing is done with an ultrasonic tool. What other tools do you incorporate?

A: WMU uses the UE Systems Ultra Probe 100 and where possible we have installed test port tee's to all the trap to cycle to atmosphere. The Test ports are most accurate but not always available. Testing via temperature is inaccurate and not used here.

Q: Does Steam Eye measure conductivity or temperature?

A: There are two ways SteamEye monitors traps; conductivity and ultrasonic. Both units monitor temperature.

Q: With SteamStar calculating emissions, do we enter the type of boiler fuel we use?

A: Yes. There are several boiler types and fuels available for selection.

Q: What is the approximate cost of a single SteamEye installation?

A: That depends on how many points you want to monitor, and layout of the facility. An example of a typical 20 to 50--trap installation will cost \$1000 to \$1500 per point. Obviously this will change with higher or lower number. The layout of the facility will also have a large effect on this.

Q: Can you please discuss the benefits of ultrasonic testing over temperature testing?

A: Ultrasonic testing is "listening" to the sound signature of a leaking steam trap. Temperature testing can tell you if the steam trap is plugged and cold, but it is not 100% foolproof for leaking, or for the amount of leaking.

Q: How do you power the SteamEye?

A: It is powered at the transmitter by a Duracell 123 lithium battery and the battery has a 3-5 year life depending on environment. SteamEye will notify the user of low battery signal.

Q: What size facility would benefit the most from a steam trap management program?

A: Any size facility can benefit. If you want to save energy and operate a reliable system, trap testing, replacement of defective traps and management of the information is for you.

Q: Did you compare the Armstrong trap program to any others?

A: No. We didn't need to. We knew it was the right thing to do to test the traps and manage the population. Fortunately, Armstrong had the tools to help us management this information effectively.
