



Intelligent System Solutions®  
STEAM • AIR • HOT WATER

White  
Paper

## What is Armstrong Intelligent Monitoring AIM®?

Three constant challenges that plant managers and maintenance personnel face in the operation of any system include:

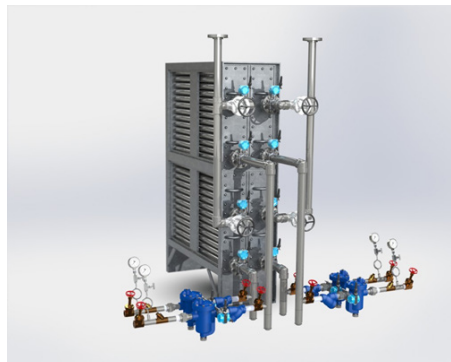
- Identifying a failure - ability to immediately pinpoint what has failed, when it failed and where it failed.
- Evaluating the scope - comprehending the magnitude of the failure especially in terms of energy lost and emissions discharged to the atmosphere.
- Measuring the impact - accurately calculate the costs including wasted energy, process disruptions and plant shutdowns, safety hazards and fines levied.

AIM® enables your team to tackle all three challenges with one system solution that combines a mix of methods including acoustic and temperature monitoring with integrated software through a smart wireless gateway to deliver:

- Immediate failure notification of equipment such as steam traps, coils, pumps or relief valves
- Immediate notification of release to flare for emissions mitigation
- Pinpoint accuracy of failure location for fast resource deployment
- Detection of “sizzling” relief valves for proactive maintenance scheduling
- Preemptive warning of hazardous vapor release to improve worker safety

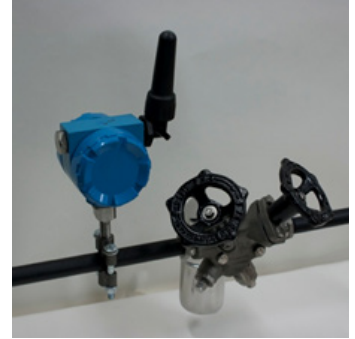
### Smart Coils

Armstrong Intelligent Monitoring is a wireless technology designed to monitor coils for immediate failure. Using AIM® to continuously monitor coils will identify a variation in operation before critical problems develop such as coil freeze-up, corrosion or efficiency loss. Identifying the source quickly can avoid the cost of replacing coils and insure reliability of the system. Using non-intrusive technology combined with WirelessHART, the AIM® system is the ideal solution for any temporary or permanent 24/7 coil monitoring.



## Steam Trap Monitoring

Armstrong's AIM® transmitter model ST5700, efficiently monitors and evaluates steam trap operation. The AIM® ST5700 identifies the conditions of a steam trap to determine significant problems that could put your operation at risk. The AIM® ST5700 can accurately detect potential issues such as plugged and blow thru steam traps which can result in a range of issues from failed equipment, to loss of product, to safety concerns. Immediate failure notification from the AIM® ST5700 helps identify the root cause while you minimize production losses and reduce energy consumption. Using nonintrusive technology combined with WirelessHART, the AIM® ST5700 is the ideal solution for any temporary or permanent 24/7 steam trap monitoring.



## Smart Condensate Return Package (ST5700/TD5100)

Combining our ST5700 and TD5100 we are able to monitor condensate return equipment 24/7 and instantaneously alert when a failure has occurred. When linking AIM® to a building automation system (BAS) or distributed control system (DCS), alerts can be customized to notify when a pump trap has failed blowing thru or stalled (flooded/backing up). Instantly knowing when a pump trap has failed eliminates losses in steam costs as well as protects the equipment from corrosion and loss in efficiency.



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