

Plantweb™ Insight Enables Continuous Monitoring of Critical Assets in a Phenol Production Facility in Asia

RESULTS

- Use of WirelessHART® devices resulted in low project setup costs and allowance for expansion projects.
- Readings from the devices and Plantweb Insight analysis enabled more timely, informed decisions, ultimately helping the facility reduce yearly emissions.
- The scalable Plantweb Insight platform allows multiple assets to be monitored, helping eliminate traditional system integration challenges.



APPLICATION

Plantweb Insight monitoring and analysis for critical steam traps and pumps

CUSTOMER

Phenol production company in Asia

CHALLENGE

The facility had been manually monitoring 79 steam traps 20 of which were critical steam traps - every 6 months. The risk of these assets suffering from sub-par performance or failing during this unmonitored period was a major challenge at this facility. Operators were required to manually collect ultrasonic readings from each steam trap and carry the gathered data back to the control room for analysis. This manual data collection method is highly susceptible to human errors and exposes workers to risks when entering the process plant. Some assets were difficult to physically reach, and their high ambient temperature condition made it unfavorable for workers to perform the data collection task.

“With Plantweb Insight, manual operator rounds were greatly reduced. We were able to validate the readings from the software and found the data trend to be consistent and accurate.”

- Plant Manager

SOLUTION

Using Rosemount™ 708 Wireless Acoustic Transmitters, ultrasonic and steam temperature measurements are automatically collected from each steam trap and sent to the Plantweb Insight software every minute. The need for manual operator rounds was virtually eliminated, along with the inaccuracies that occur from utilizing this method. WirelessHART devices can be installed without the need for wiring and IO infrastructures, and once installed, existing Gateways can be leveraged to introduce more sensors (up to 100 sensors with 1 minute update rate). This resulted in low setup for monitoring the steam traps and low expansion cost for also adding monitoring capabilities to their pumps.

Plantweb Insight enables seamless and secure data transfer between maintenance, operations, and management. User access was setup according to individual roles (admin, maintenance, and operations), and the data for each asset can be viewed in a single dashboard by all stakeholders within the intranet environment. In addition to steam traps and pumps, the platform also enables the use of other analytics applications such as Heat Exchanger, Pressure Relief Valves, Cooling Towers and more. The customer was able to validate the readings from the Plantweb Insight software and found them to be consistently accurate and reliable, putting them on the path to a scalable and successful digital transformation journey.



Plantweb Insight dashboard with real-time asset management monitoring

RESOURCES

Emerson Automation Solutions Industries

[Emerson.com/Chemical](https://emerson.com/chemical)

Plantweb Insight

[Emerson.com/Plantweb-Insight](https://emerson.com/plantweb-insight)

Rosemount 708 Wireless Acoustic Transmitter

[Emerson.com/Rosemount-Wireless-708-Acoustic](https://emerson.com/rosemount-wireless-708-acoustic)

Asia Pacific Regional Office
Emerson Automation Solutions
1 Pandan Crescent
Singapore 128461

+65 6777 8211
+65 6777 0947
Enquiries@AP.Emerson.com

The Emerson logo is a trademark and service mark of Emerson Electric Co. Brand logotype are registered trademarks of one of the Emerson family of companies. All other marks are the property of their respective owners. ©2020 Emerson Electric Co. All rights reserved.

00830-0100-4102 Rev AA

Consider It Solved.

Emerson Automation Solutions supports you with innovative technologies and expertise to address your toughest challenges.

For more information, visit [Emerson.com/Wireless](https://emerson.com/wireless)