Improve availability, safety and reliability across the enterprise.

Plantweb™ Optics
Deliver comprehensive asset health to relevant users anywhere they are.
When your data exists in silos, your teams will work that way as well.

One challenge all industries have in common - data silos. Different areas or departments in the plant looking at different condition or process indicators to set their own priorities. Sometimes they are focused on the same problem, but do not have the complete information to quickly identify the root cause of the problem. And that’s just within one facility - the same silos can exist in every facility across the enterprise. How will the different areas - and locations - in your company share in achieving business goals when they aren’t sharing the same information?

Production capacity is lost to as much as 5% every year as a result of unplanned shutdowns.

When asked to describe their attitude towards maintenance, 39% of respondents said “a profit center for delivering greater capacity” while another 39% said “a cost center needed to keep equipment running.”

Breaking down data silos is more than an IT task – it’s an exercise in building a more collaborative culture.

What if you had all the data from your assets and could quickly identify and focus on the issues that impact asset availability? What if you could share the right information with the right people at the right time?
Plantweb Optics creates actionable information in a collaborative work environment.

As industry embraces a new age of digital transformation, staying on top of asset health in the plant is easier than ever before. Advanced communication tools keep personnel in touch to collaborate on developing production issues. Data from predictive intelligence applications and analytical tools are aggregated to create a holistic picture of asset health. And all this information is available anytime and from anywhere.

Emerson’s Plantweb digital ecosystem is a scalable and secure portfolio of transformational technologies, software and services that provide relevant personnel with enhanced insight to enable actions that drive operational excellence.

Plantweb Optics is the asset performance platform for managing asset health across the enterprise. As a component of the ecosystem, Plantweb Optics connects the data from multiple applications into asset-centric information to deliver persona-based alerts and KPIs for production assets. Connectivity to AMS Machinery Manager, AMS Device Manager or Plantweb™ Insight centralizes different sources of data that can be used to drive corrective actions by connecting to CMMs and creates a proactive workflow. These applications are used to monitor, diagnose and analyze rotating equipment, instruments and valves for improved decision making.

Manage and share priorities instead of chasing the unexpected.

When your critical data exists in silos, you need a way to prioritize your assets and their performance across the enterprise so you can focus on the real threats to production. Plantweb Optics integrates those silos and automatically receives important information about asset health. Users are notified of developing issues with the assets they manage, allowing them to best focus their limited resources in the right direction.

Make the right call at exactly the right time.

When you aren’t able to accurately predict equipment failures, you lose profits, production, even confidence in your maintenance program. When you have insight into the production assets in your facility, you can make the real-time, informed decisions necessary to maximize availability and reduce unexpected interruptions. Plantweb Optics alerts you to those situations that need your attention so you can take charge.

Alert the right people before trouble strikes.

If you can’t easily share information with your team, developing problems will go unresolved. You need to keep the right people informed, especially when a situation is developing quickly. The Plantweb Optics mobile application delivers alerts to your team so you can collaborate on the actions necessary to avoid downtime in the plant.
When you keep a close eye on critical assets, you improve reliability.

At any given time, there is something going on in your assets that can impact whether or not your plant achieves production goals. And the person who needs to know what is happening is not onsite – in fact, they may always work from a different location. With Plantweb Optics, the information everyone needs is available anywhere they have internet access. Advanced, accurate assessments of developing problems can be determined. Actions can be taken immediately – or when it is convenient – based on the problem severity. With Plantweb Optics, you’ll move easily from data to information to actions that improve your plant reliability.

What’s your challenge?
Technical professionals may be spending as much as 60 percent of their time managing data before they are able to focus on the more critical, “value-added” work such as analysis and decision-making.
- Jon Krome, John Matson, and Greg Mitchell.

“Connecting the dots,” Exploration & Production, December 2006.

What’s your opportunity?
With Plantweb Optics, there is a measurable shift away from managing data to acting on information. Greater visibility to more assets in the plant doesn’t have to mean more data to sift through – the Asset Viewer utility focuses your attention on the assets that require it most.

Holistic, cyber-secure view of assets
Secure and flexible architecture allows installation on different layers of your network without compromising security.

The asset-centric approach vs technology approach represents your assets the same way they exist in the field, providing a familiar, holistic view of plant assets.

Make better decisions from a clearer picture
Available Now
CMMS
Plantweb Insight
AMS Device Manager
AMS Machinery Manager

Coming Soon
DeltaV Insight
KNet Analytics

In Development
Connected Services
Plantweb™ Advisor
Modus
Edge Device

Connect additional software programs to expand data used in calculating the Health Dashboard, and introduce advanced diagnostics to further diagnose developing problems or poor asset performance.

Communicate with clarity
Responsibility determines information access so each person sees only applicable data.
Alerts on mobile devices keeps everyone connected in real time.
Close the loop on workflow in the plant.

Plantweb Optics allows you to manage a work request from within the platform without having to navigate to a different application, and then validate the effectiveness of the action when the work order is complete. For example, here is the health trend of what might be a valve in your plant. The blue line is the health trend, and the health value of 100 on the far left indicates a steady state. When the health starts to deteriorate, all the relevant users are notified of the situation and are able to collaborate in real-time to arrive at a decision. The mobile functionality allows users to collaborate with expertise both inside and outside of their facility. They manage the response by raising a work request or notification in their CMMS. Once the work is completed, they validate the health of the asset to confirm the effectiveness. By centralizing the digital framework around Plantweb Optics, they closed the work loop and improved reliability within the plant.

Familiar interface

Intuitive navigation

Similar visibility to asset health on all devices

Asset-centric information in a common tree-type structure

The Plantweb Optics Asset Viewer utility provides a KPI dashboard view of monitored assets and alerts you to developing issues on the assets you define as critical to your production. The interface is similar across desktop/tablet/smart phone views for ease of use, while the mobile app provides a multi-site view for easy review of alerts across the enterprise. Drill down on individual alerts for more details and launch diagnostic applications for asset health diagnostics.

The asset explorer utility allows you to quickly define assets for the site and the roles/responsibilities across the enterprise. Explorer periodically polls the network architecture to discover wired and wireless assets added to or removed from installation and makes the appropriate adjustments in Plantweb Optics. Within minutes of installing, you’ll be able to look at the health of your asset.
Bring together parallel worlds within the plant.

In most industries, processes are monitored using some form of automation system like DCS or PLC. A parallel world exists for reliability engineers monitoring their rotating assets and using vibration data to understand the health of those assets. There may also be plant managers or shift engineers looking for more analytics specific to asset classes, process performance, or energy management. Three different types of personnel working with different but equally important data. They may each know when there is a problem, but not the root cause of the problem. Plantweb Optics centralizes the data for a holistic view of asset health, and then delivers information to each individual in the context of their specific role in the plant.

### Monitor instrument and valve health

- **AMS Device Manager**
  - Make informed decisions on field device maintenance. AMS Device Manager is a window into the health of intelligent field devices.

### Diagnose rotating equipment problems

- **AMS Machinery Manager**
  - Create a comprehensive view of machinery health across mechanical assets. AMS Machinery Manager integrates multiple predictive maintenance techniques for complete diagnostics on your rotating equipment.

### Expanded visibility into asset health

- **Plantweb Insight**
  - Improve decision making for specific asset classes or devices. Plantweb Insight is engineered with machine learning-based asset modules and analytics for instant visibility to key assets.

### Create Closed Loop Workflows

- **Third Party CMMS Systems**
  - Connect to popular CMMS systems to create a closed loop of workflow across the enterprise.

### Preconfigured applications for fast results

- **Plantweb Advisor (coming soon)**
  - Increase reliability, efficiency, and safety of critical production assets. Plantweb Advisor is a suite of analytical applications delivering critical information about equipment health and efficiency, including energy consumption and emissions.

### Add expertise to your team

- **Connected Services (coming soon)**
  - When you need more heartbeats to solve a problem - or just get the analysis done - add expertise to your team in the form of Connected Services. These experts can provide results directly to Plantweb Optics, ensuring everything you need to know is in a single location.

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Personas and Connections Diagram:

- **Instrument personnel dealing with device management.**
- **Process personnel such as plant managers or shift engineers.**
- **Reliability personnel dealing with rotating machinery.**

- **Connected Services**
  - **Plantweb Advisor (coming soon)**
  - **Connected Services (coming soon)**

- **Plantweb Insight**
  - **Third Party CMMS Systems**

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Persona Based Content Delivery
Focus your attention on the assets that need it most with Emerson’s Plantweb Optics.