Plants today face pressure to operate more efficiently with a smaller budget. Combined with aging infrastructure and equipment that is being taxed to the limit, it’s no surprise that engineers, plant managers, and other stakeholders need modern solutions. Plant-wide monitoring solutions satisfy the efficiency and time-sensitivity needs of many industry facilities.

Half of our customers report experiencing unplanned downtime every year. That adds up to thousands of dollars in lost revenue.

Are you concerned your company is being left behind in your industry? Are you worried about investing in the right tools? Are you underutilizing data and you know it?

Leveraging plant-wide condition monitoring for all assets could be the solution you seek!

Plant-wide monitoring uses asset sensors to report real time abnormalities and failures. The data provided speeds up analysis of the problem and points you toward the right solution.

In short: Plant-wide monitoring solutions bring fragmented facilities together under a united interface at last.

Current Industry Challenges

- 50% of the workforce is set to retire in the next 5 to 10 years, and knowledge and experience are not being transferred
- 3 to 5% of production is lost due to unplanned events, which costs up to 5x more than planned events
- 20% average reduction in target spending costs, with an increased pressure on performance goals
- Fleets may be well understood, but only in fragments
- Insights are slow to deploy and difficult to scale with plant growth
- As assets age, the availability of replacement parts and cost implications of failures become an even bigger problem

Benefits of Plant-wide Condition Monitoring

- Identify machine challenges in real time
  Condition monitoring systems recognize root cause failure mechanisms in progress
- Flag damage as soon as it happens
  Plant-wide condition monitoring can help a plant identify damage in progress well before system failure.
• Provide data to answer questions
  The data provided by a plant-wide system directs the appropriate stakeholders toward what is wrong, what they need to do, and if the machine can continue to run.

• Visualize asset condition with a user-friendly interface
  Good plant-wide condition monitoring allows users to combine mechanical, process, and control data within the same software and makes prioritization easy.

• Leverage wireless and portable solutions for flexibility
  Wireless monitoring equipment offers flexible deployment, semi-continuous data, and is ideal for low to medium risk assets. Portable analyzers and collectors work for periodic and route-based monitoring

• Use wired solutions for tried and true solutions
  Wired condition monitoring sensors offer more sensor types, higher point counts, and the fastest sampling rates.

**Getting Started with Plant-wide Solutions**

1. Working with plant-wide monitoring begins with the installation of sensors on serviceable assets, including rotating machinery and stationary assets. Keep in mind that plant managers should work with the installation team to retrofit or modify machines as needed to ensure the appropriate installation of monitoring instruments.

2. Once sensors are installed, data measurement begins. Sensors can immediately measure:
   - vibration and position
   - rotor speed
   - temperature
   - operating processes

3. Data will be transmitted directly from the sensors to a centralized software system for evaluation. The HMI allows administrators and other approved employees real time access to condition monitoring feedback. Technicians are notified when an abnormality is detected, and the provided data lets them know if the machine requires immediate attention or shut down.

**Finding a Plant-wide Monitoring Partner**

Bently Nevada has developed our condition monitoring expertise on 60+ years of experience, 15,000+ machinery diagnostic projects, 6+ million monitoring points installed worldwide and 60,000+ service jobs performed. For Bently Nevada, helping industrial companies with outcome-based condition monitoring solutions and remote services is at the core of who we are and what we do.

[View the webinar on demand]