



# Optimize efficiency, improve productivity and reliability while reducing maintenance... Yes, it can be done!

## Insights from Plant-wide Maintenance Webinar

Current industrial maintenance trends indicate that in order to remain competitive, industrial plants will need to make major changes to current, outdated maintenance strategies.

### Trend No. 1

Global oil and gas companies are reducing internal operating expense targets by 20% while increasing pressure for operating performance

### Trend No. 2

50% of current maintenance workforce will retire in the next 5 to 10 years. Their knowledge and experience is not being transferred.

### Trend No. 3

3-5% of lost production in oil and gas markets is due to unplanned events, which cost 2-5X over planned events

### Trend No. 4

Companies are making a 20% increased investment in digital technologies year over year

## Consequences of poor maintenance strategy

- Overall plant production capacity reduced by 5–20%
- Unplanned downtime costs industrial manufacturers \$50 billion/year
- Downtime can cost about \$22,000/minute

## Adopting a proactive, plant-wide maintenance strategy can drive consistent uptime, lower maintenance costs and improve production reliability.

### How?

The ideal maintenance model is 5% reactive maintenance and 95% proactive and predictive maintenance.

### What is a plant-wide proactive and predictive maintenance strategy?

- Addressing every individual plant machine as unique and customizing a modern maintenance strategy to most effectively monitor the condition of each asset
- Continuous monitoring of essential assets is a good start but it's not enough

## Types of condition monitoring technologies

No one condition monitoring solution covers all vulnerabilities. The ideal plant maintenance strategy combines different technologies that work together as one comprehensive solution.

- **Portable**
  - Ideal for periodic monitoring of non-essential assets
  - The foundation for any plant-wide condition monitoring strategy and a great place to start
- **Wireless**
  - Ideal for harder to access areas and those with safety concerns
  - Easy and cost-effective to start a reliability maintenance program with wireless monitoring solutions
- **Wired Online Scanning**
  - Ideal for rolling element bearing machines (REB)
  - Extends equipment service life by proactively monitoring the unique rotation and service signatures of individual machines

## The ideal comprehensive condition monitoring solution

- Combines each of the different monitoring technologies
- Connects to a single software system where data from each monitoring sensor is processed and analyzed in one central location
- Is efficient, flexible and ideally has multiple measurement and sensor capabilities

## How do you choose which type of monitoring equipment to use for each machine?

When exploring the different technologies available, don't just look at the needs of individual assets. Instead, examine how an asset fits into overall plant process. How frequently do you need to view data for that asset to ensure that you'll be able to proactively identify a problem?

Be sure to choose a maintenance technology partner who will help you conduct a reliability assessment and develop a comprehensive maintenance strategy that is customized for your plant's unique needs and organizational structure.