Condition monitoring solutions for the pulp and paper industry
Why partner with Bently Nevada?

We have earned your trust. For six decades the Bently Nevada product line has supported the most demanding applications in multiple industries. And even as we protect and monitor your machinery, we constantly strive to refine and improve our offerings—and help enable your success.

We design and deliver solutions for all of your monitoring needs—including sensors, distributed and rack-based monitors, software, and supporting services—with the following goals:

- Increased availability and production
- Lowered maintenance costs
- Reduced risk in terms of safety, environmental, and asset aspects

Quantifiable, proven results:
- Over 60 years of innovation in asset protection and condition monitoring
- More than 240 international patents issued, including over 150 in the U.S.
- More than 360 international patents pending, including over 85 in the U.S.
- Over 85,000 3500 Series monitoring systems installed globally
- Over 4 million sensor monitoring points
- Services support globally
- Over 1,600 System 1 software users worldwide

Condition monitoring

While condition monitoring may not be the only element in a successful reliability program, it is nonetheless an essential part.

For years, we’ve been taught that the older an asset is, the more likely it will fail. As such, many mills have evolved elaborate and finely tuned maintenance schedules based on calendar intervals or running hours.

There’s just one problem with that approach: it’s only valid for about 15% of the assets in most facilities.

In other words, if you’ve applied this strategy to the majority of your equipment, most are getting “maintained” when they don’t need to be. That’s wasteful, and it’s one of the major reasons that many companies are overspending on maintenance.

Today we understand that the probability of an asset failure is often highest just after it has been placed in service or undergone maintenance. Following this “infant mortality” period, its probability of failure becomes constant and does not rise linearly over time. This means that running hours and calendars are poor “predictors” of failure for many assets. So how do you know when such assets will fail if the time–based intervals can’t be trusted? By measuring the condition of the asset using vibration, temperature, efficiency, oil chemistry/particulates, and other physical parameters.

Different assets, different approaches

Not all assets are created equal. Some, such as paper machines, boilers, refiners, gearboxes, turbine generators and compressors are critical to operations. Others, such as small pumps, fans, motors, presses, mixers, and equipment with spare or backup units installed, are less critical. And still others have less impact on safety or production, with only maintenance costs as the primary consideration. As such, a variety of condition monitoring products and approaches are required.
Condition monitoring applications in pulp and paper

Additionally, we monitor the following assets throughout the process:

- Pumps
- Motors
- Compressors

Contact your representative for more information on condition monitoring for these assets.
You can rely on us

For more than 50 years, we’ve been supplying condition monitoring solutions to machinery-intensive industries. We also bring two decades of experience conducting reliability improvement projects. Customers turn to us for a simple reason: lasting value. Our solutions demonstrate their worth, day in and day out. We combine the highest quality products and responsive customer support with a service team that takes the time to understand the uniqueness of your plant, your personnel, and your goals.

Our products can be found in many of the world’s pulp and paper plants. Today, many of those same plants are turning to Bently Nevada for a more comprehensive solution to their needs, moving beyond just machinery protection instrumentation on a few assets to plant-wide strategies and systems for improved environmental compliance, safety, asset production, quality and reduced operation and maintenance costs.

Bently Nevada service menu

Key benefits

Implementation services

Get it right the 1st time
- Ensure your assets are protected and monitored when you’re ready to startup
- Avoid costly delays and rework
- One source to design, plan, manage, and execute the installation
- Avoid startup trips due to improper installation and configuration

Up to $1M/day
Avoided cost from lost production, secondary process & equipment damage

100% Service work guarantee
1 year warranty standard on all service work

Proactive support

Keep your system healthy and optimized
- Prevent instrumentation related false trips
- Prevent and minimize potential data loss events
- Keep up to date and compliant with the best technologies available
- Access the expert support you need when you need it most

80% Industry wide machinery alarms & events are due to instrumentation

>90% Typical reduction in non-actionable alarms & events

Asset health and consulting

Actionable insights you can trust
- Understand your asset health to optimize outage and maintenance planning
- Plug in to our global network of machinery experts with remote monitoring
- Professional OEM agnostic machinery diagnostics when and where you need it
- Custom analytic development and tuning to pinpoint specific conditions

100% ROI
A single machine save often results in complete maintenance contract payback and more

5-10X Cost reduction for well-planned maintenance outage vs unplanned reactive outage

Cybersecurity

Stay ahead of evolving cyber threats
- Ensure your system is up to date and protected as threats continually evolve
- Identify and mitigate cybersecurity risks to your operation
- Keep your system both secure and accessible with advanced security technologies and architectures leveraging data diodes and database replication

29% Patch management can reduce your attack surface up to 29%

243 days Average time before detection that a system is compromised

Training and education

Critical skills that amplify your machinery management capabilities
- Enable your personnel to operate and maintain your monitoring and protection system
- Enable your operation to maximize the value of your system leveraging expert product and application training and knowledge

400+ Customer courses delivered each year in 10 languages and over 45 global locations

Leading the industrial world.

Digital technology and the Industrial Internet of Things (IIoT) are dramatically impacting the way processes are managed, operated, and maintained. A second Industrial Revolution is underway, and the future belongs to the companies that tap into the flood of available new data.

Production process data enables more efficiency at lower cost than ever before. To gain the competitive advantage, you need a partner who will not only help you navigate these new capabilities, but will also prepare your operation for even greater technical advances. Bently Nevada is ready to be that partner.

By combining a legacy of deep machine knowledge with our digital industrial vision, Bently Nevada is reimagining the way that people, machines, and data come together—allowing industry to go further.

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60+ Years

Bently Nevada has led condition monitoring

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4,000,000+ 135+ Experts

Machine sensor points installed globally  Machine Diagnostic Engineers worldwide