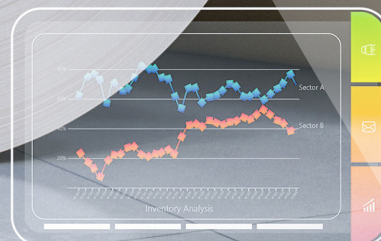


Improving Equipment Reliability in Pulp & Paper Operations





Optimise equipment performance with Acoem

In the pulp and paper industry, machine reliability is essential for efficiency and profitability. Harsh conditions—humidity, heat, dust, and chemicals—can cause performance issues, leading to downtime and safety risks.

Acoem understands these challenges and provides tailored solutions for pulp and paper plants. Through real-time monitoring and predictive maintenance, we help prevent failures, optimise performance, and extend asset lifespan.

Why choose Acoem?

Nobody else in the global industrial reliability market can match Acoem when it comes to flexibility, expertise, field experience, technology and R&D.

- Patented automatic diagnostic AI
- Reliable advisor
- Holistic ecosystem
- Efficient at 100% since day one

Trusted by industry leaders for smarter & reliable operations

Our industrial reliability solutions are trusted by leading pulp and paper industry brands to optimise machine performance, drive efficiency, and prevent failures in their operations.



How Acoem ensures uninterrupted operations:

- **Protecting critical processes**
By monitoring key assets like pumps, refiners, and paper machines to maintain productivity.
- **Minimising downtime**
Real-time monitoring that detects imbalance and bearing faults early.
- **Optimising performance**
Data-driven insights to enhance dryer, roller, and conveyor efficiency.

Reliability insights for the Pulp & Paper industry

- 60%**
Failures are due to poor maintenance.
- 80%**
Manufacturers rely on reactive maintenance.
- 10%**
Operating costs go to maintenance.
- 1**
Bearing roll failure can halt a paper machine for hours.



Accurex AI identified low oil flow as the roller issue—three times lower than needed. After adjustment, temperatures nearly halved. FALCON made troubleshooting effortless, preventing failures and downtime.

Workshop manager,
Valmet



With Acoem's EAGLE, we monitor all rollers with one gateway, ensuring continuous insights. Its scalable design simplifies expansion, helping us detect issues early, reduce downtime, and optimise maintenance.

Reliability manager,
Munksjö



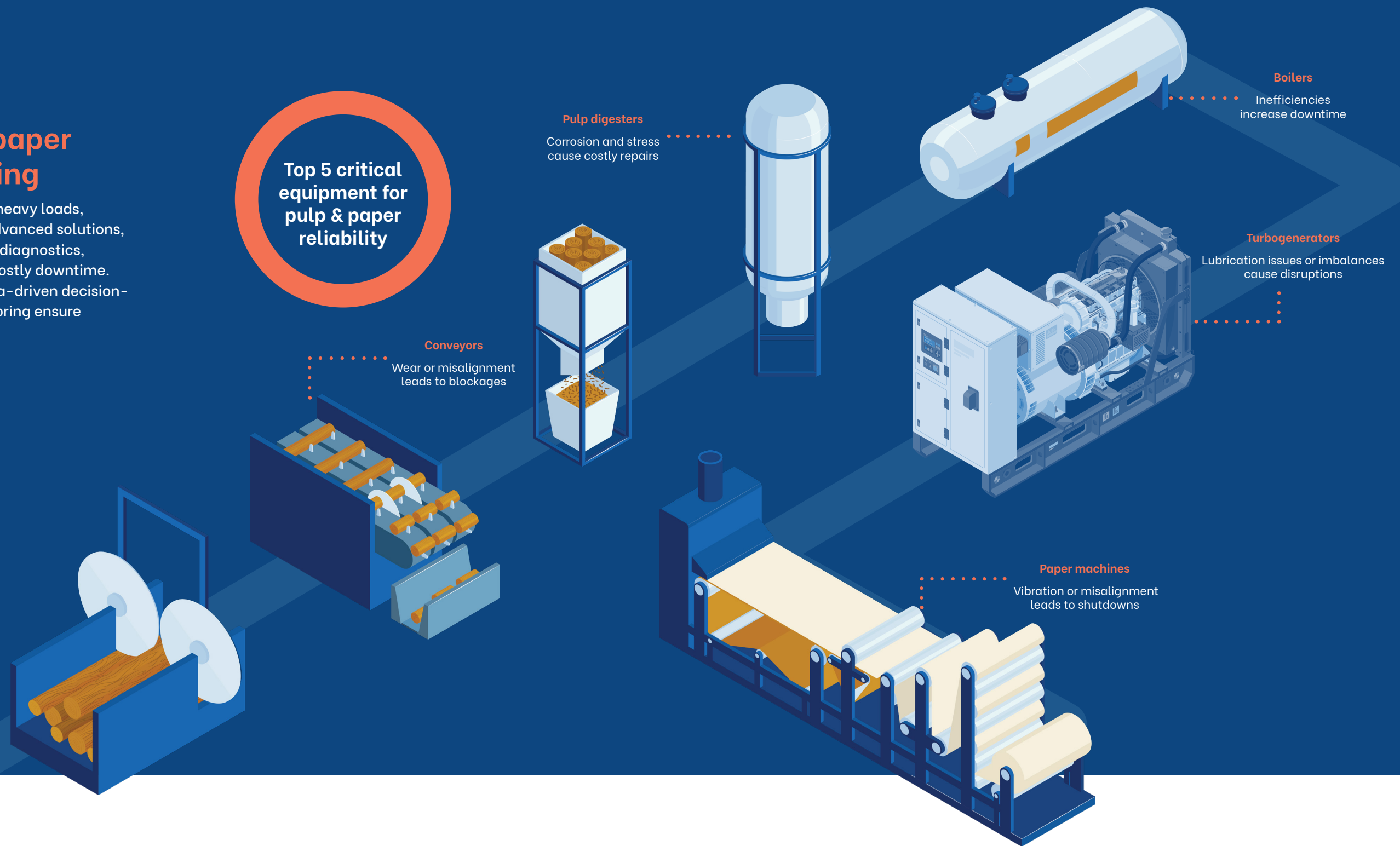
Keeping pulp & paper operations running

Pulp and paper equipment face heavy loads, making them prone to failure. Advanced solutions, like real-time monitoring and AI diagnostics, detect issues early, preventing costly downtime. Predictive maintenance and data-driven decision-making enabled by smart monitoring ensure smoother operations.


This approach helps businesses achieve:

- Reduced maintenance costs
- Consistent production


Top 5 critical equipment for pulp & paper reliability




Acoem's key technologies to ensure operational efficiency



Shock finder™
Quickly detects abnormal vibration patterns, enabling immediate corrective actions to prevent equipment failures.



Acoem MCT™
(Machine Condition Tracking): Designed for use with Eagle and MV-x systems to monitor equipment in dynamic environments.



Smart anomaly detection AI
Cutting-edge analytics for precise fault identification and prediction, minimising unplanned downtime.

Tailored solutions for pulp & paper operations

Our solutions address key reliability challenges to ensure your equipment runs smoothly and your production stays on track. It includes:

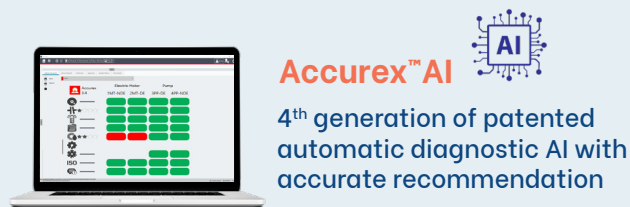
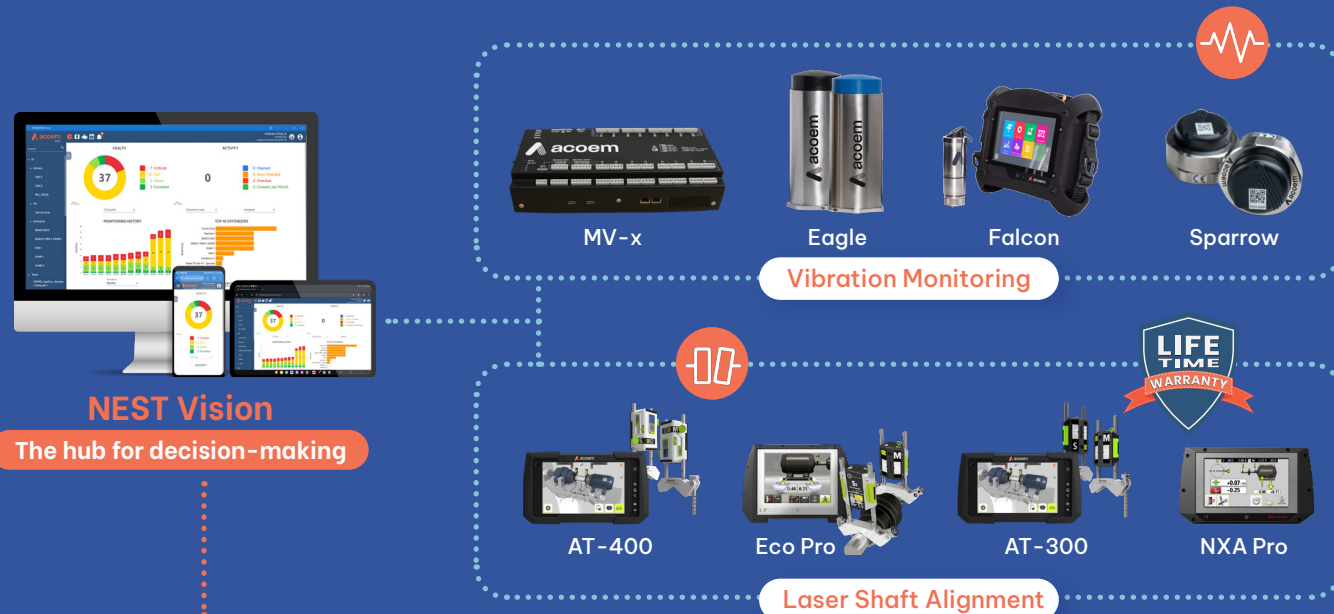
- Health assessments**
For critical equipment like pulp digesters, pumps, and motors, enabling early failure detection.

Precision alignment and calibration
For rotating machinery, improving performance and reducing wear in paper machines and refiners.
- Dynamic balancing**
Of fans and blowers, preventing unbalanced loads in dryer sections and ventilation systems.

Advanced troubleshooting
Using real-time data to diagnose and resolve issues in key machinery.

Acoem helps you to have **eyes on every asset**

With over three decades of expertise in asset reliability, we deliver tailored solutions across sectors, ensuring optimised performance and long-term asset health.



Empower your team with tailored training

Customised programs to enhance expertise in:

- Vibration technology
- Bearing technology
- Turbo machinery alignment
- Precision maintenance

Transformative maintenance practices

We help your team adopt best practices for long-term reliability and cost-effective operations.



Success stories

How Acoem's AT-200, Sparrow & NEST Vision delivered 10x reliability

Challenges

A prominent US-based paper mill faced frequent equipment failures between maintenance checks, leading to costly downtime. Limited in-house reliability expertise made effective monitoring difficult.

Acoem's solution

- AT-200 app-based shaft alignment ensured precision and efficiency.
- 76 Sparrow wireless sensors enabled real-time monitoring.
- NEST Vision centralised asset health and enabled remote diagnostics.

Impact on operations

- Eliminated unforeseen failures with condition-based maintenance.
- Reduced corrective maintenance and optimised preventive tasks.
- Achieved tenfold performance gains and enhanced reliability.



Preventing costly downtime in the paper industry with Acoem's FALCON, MV-x & Advisor

Challenges

A global leader in the paper industry faced challenges in maintaining the reliability of Inertial Shaft Assemblies (ISA), which are subject to complex kinematics and high vibration levels. Undetected mechanical defects led to accelerated wear, increased maintenance costs, and potential production losses.

Acoem's solution

- Deployed FALCON for real-time vibration diagnostics.
- MV-X ensured continuous monitoring and protection of critical machines.
- Advisor provided AI-driven analysis with expert analysis and actionable insights.

Impact on operations

- Minimised downtime with early failure detection
- Enabled proactive maintenance through remote monitoring
- Enhanced performance for rapid ROI and customer satisfaction



Acoem:
Your partner in industrial reliability

At Acoem, we are committed to helping organisations and public authorities find the right balance between progress and preservation. We empower industries with smarter, data-driven reliability solutions to safeguard assets, optimise performance, and ensure operational excellence. Our AI-powered monitoring systems and expertise help organisations predict, prevent, and resolve reliability challenges with confidence.

With a global presence in 50 countries and dedicated reliability centres in strategic locations worldwide, we provide localised expertise and support to keep industries running efficiently.



Reliability centres

- **Australia**
- **Brazil**
- **Canada**
- **France**
- **Germany**
- **India**
- **Sweden**
- **Thailand**
- **USA**
- **UK**

