



How Can You Ensure Success

If You Can't See What's Happening
to Your Paper Machines?

The Challenge:


Lack of adequate monitoring for reliability

Your levels of stock, whitewater, broke, and ORP demand can be highly variable—as is the papermaking system itself. Broke levels constantly change, as do whitewater storage and contamination levels entering the process.

A batch-dosing strategy leads to frequent overdosing and excessive corrosion, or underdosing and process instability. This compounds the problems, and variability is only going to increase throughout the entire process, including decreased use of freshwater, increased use of recycled water, variable and rising residence time in storage towers, the introduction of additional grades, and more.

Without understanding the root cause of the problem, too often mills slug dose around the machine because that's where they see slime develop. Others resort to complicated feed strategies with multiple products. Or they do things like supplementing with caustic, bicarb, or calcium hydroxide solution in an attempt to control pH suppression.

These approaches treat the symptoms but mask the problem. Without visibility into the root cause, you'll continue to see variable functional chemistry performance and other instabilities. This takes a toll on mill assets, causing premature aging of equipment and putting you in a reactive maintenance mode. All these lead to production issues, increased shutdowns, and quality problems.



▶ ▶ ▶ **Treat the symptoms
but mask the problem**




The Solution:

Respond swiftly to process variations

Keeping precisely the right amount of MCA flowing into your system is vital to control slime and odor without overdosing, but the constant variations throughout the process make it a moving target.

With Ackumen™ MCA-i™ that streams real-time and stores historical data about your process—and is monitored

24/7 by our Insights Lab—you can understand what's currently happening and address variability before it compounds and creates long-term problems. You'll improve day-to-day troubleshooting capabilities and gain better control over conductivity, odor, corrosion, deposition, and other issues that affect quality, uptime, and profitability.



Monitored 24/7 by our Insights Lab
to address variability

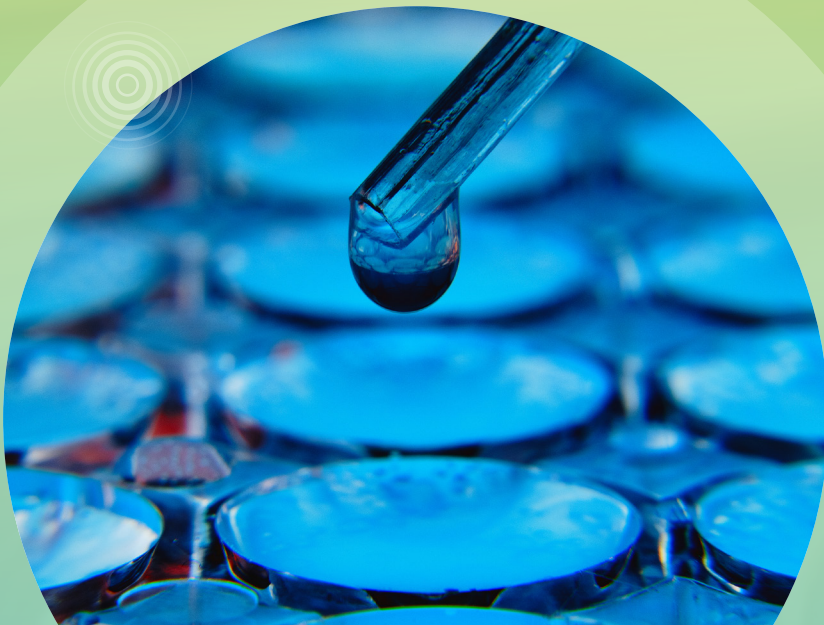
The Solution:

Manage inconsistent fiber quality from the start

The quality of furnish that comes into your mill affects the entire process, including your final product's quality—and the price you can get for it. You can't always control those inputs, which means you can see huge swings in quality.

When you work with Ackumen™ MCA-i™ predictive dosing, which continuously monitors and rebalances, you can stabilize your chemical and microbiological process by dosing

to your production rate, redox, and grade mix changes. And you can use less expensive furnish without creating problems within your operation. By being able to manage how fiber quality swings impact microbiology, you'll reduce water usage and improve profitability and sustainability.



You can stabilize your chemical and microbiological process

The Solution:

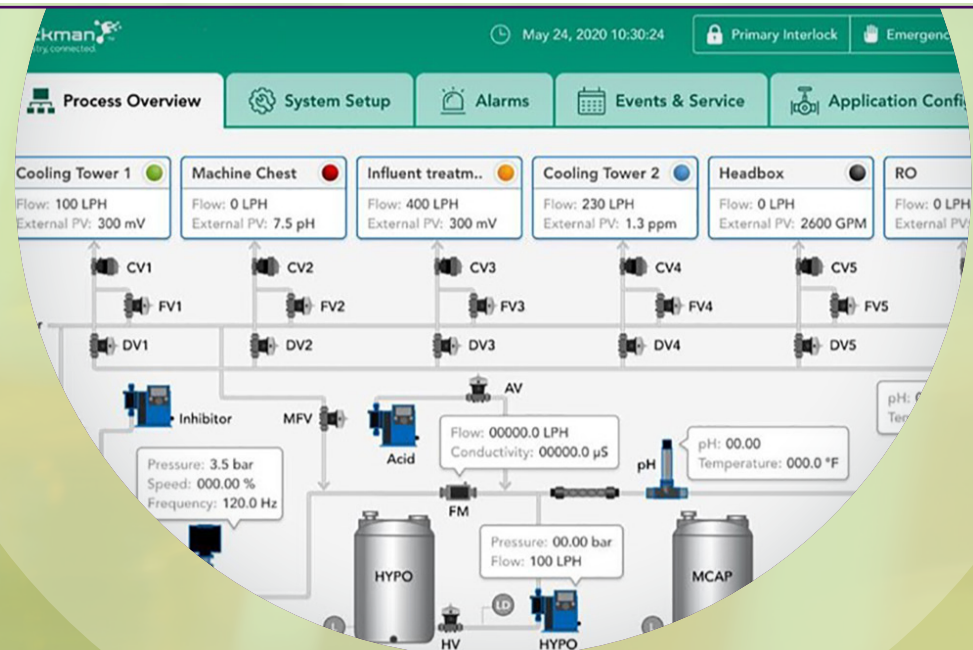
Minimize unplanned downtime

Keeping your mill operations running efficiently requires all your equipment to function at the required levels. Maintenance is necessary, but it shouldn't be disruptive. Any failure—even a small one—can have a significant effect on productivity.

With Ackumen™ MCA-i's predictive, preventive maintenance via our self-checking MCA generator with automatic system monitoring and instrument calibration, as well as remote software upgrades, you can avoid equipment-related headaches and outages.

Because the system can proactively identify issues and put remediation plans in motion, you can minimize downtime. For example, if a problem is detected with a pH meter, the system will proactively have a new one sent to your local rep before you even realize there's an issue. As a result, you'll focus on papermaking, not your vendor's equipment, with full confidence in your wet-end stabilization program.

You can use less chemistry
and limit supplemental biocides



Consistently maintain optimal control

No question—there are a lot of variables to contend with to maintain a reliable and safe process on an ongoing basis. And you can't control them without a clear understanding of what's happening throughout the process. With Buckman, you can.



Ackumen™ MCA-i™ can monitor variability and react quickly at every point through the production process



Predictive dosing lets you dose precisely the right amount of MCA at all times.



And predictive, preventive maintenance helps you keep your equipment running at peak efficiency.

With insight into how your process is working at all times, you'll **minimize the negative impacts** of big swings and **avoid unplanned downtime** to maintain productivity, quality, and profitability.

Buckman™
Chemistry, connected.

Interested in learning more?
Please [visit our website](#) to get started.