



Untrustworthy Data?  
It Can Lead to Inconsistencies  
Across Your Mills.



# The Challenge:

## Inconsistent and Unreliable Process Controls

Distributed Control Systems (DCS) have been ubiquitous in the pulp and paper industry for decades. And for all of that time, mill operators have had a complicated relationship with them. Put simply, very few operators trust the controls within the system because they often believe the DCS is running on suspect data.

### So what's the issue with the data?

It's typically extracted via sensors that require frequent calibration and maintenance to stay accurate. Because most mills don't have the time or resources for such up-keep, the data drifts and operators end up manually adjusting parameters when they notice issues. And each crew that comes in may have different ideas and settings that work for them, limiting process continuity.

### What's the impact on the mill?

- Energy, water and chemicals are wasted combating day-to-day variation, not isolating and mitigating root causes
- Product quality, throughput and total cost of operations won't meet established benchmarks
- Leadership might not get funding for new solutions—leaving them behind competitors further along the journey to becoming a mill of the future

Here's what you need to do to avoid these negative outcomes...



Over the last 25+ years, the number of people making paper has **shrunk by more than 50 percent**, but the industry is **producing about the same total amount** of paper and paperboard.<sup>1</sup>





## Base Interventions on Trusted Data

Think about the environment within your washing process: With high temperatures, intense pressure, high alkalinity and variable media consistency, it's incredibly hostile to most sensors and metering equipment. This means operators often don't trust their readings—especially when data has drifted—so any corrective action they take is based more on inferences and intuition than facts.

In contrast, Buckman's ECHOWISE® uses sonar-based technology that can take accurate readings in 0 to 125°C conditions and up to 20% consistency media. And because it's a non-intrusive design, it won't be exposed to the harsh conditions of your process, eliminating the usual maintenance and recalibration requirements.

As a result, your operators can trust that their readings are accurate—both in the moment and over time—so they'll have the confidence to base interventions on the data, not their guts.

And as this confidence spreads throughout your mills, you'll start to create alignment among your staff that will naturally eliminate much of the man-made bias and variability within your processes. This way, you'll be better equipped to increase quality and throughput and more consistently deliver on customer demands.

**ECHOWISE** can take accurate readings in **0 to 125°C conditions** and up to **20% consistency**.





# Maintain Accurate Readings Without Calibration or Maintenance

For many organizations, it's hard enough to get a single, accurate entrained air reading from the washing process. Consistent readings over time, then, can feel nearly impossible.

But because the ECHOWISE® sensor does not require ongoing calibration or maintenance to maintain accurate readings, you'll eliminate the data drift that often creates distrust in the measurements among your operators. And, you'll cut instrument downtime related to recalibration, as well as the process control gaps it creates.

This way, operators and mill leaders will be able to identify entrained air trends with the utmost confidence. They'll be able to correlate air measurements with other variables within the process, and respond with consistent, real-time control strategies. For example, they could add a specific amount of defoamer at the time a spike occurs to bring air down, increase drainage and maintain overall process efficiency.

**ECHOWISE** uses a  
consistent process to measure  
entrained air trends that  
requires **no maintenance or  
recalibration** over time.



# Create Alignment Among Your People, Technology and Processes

No more operators relying on intuition and manual interventions. No more inconsistencies across shifts. And no more suspect data.

When you partner with Buckman, you'll create alignment among your people, technology and processes.

That means your operators will be able to **capture accurate entrained air readings** without having to alter any existing equipment or perform interruptive calibrations.

You'll **avoid data drift**, so you can institute better, more reliable process control.

And you'll start to **eliminate the variability that happens when operators don't trust the system**, increasing throughput and quality while targeting other opportunities to evolve your operations for increased efficiencies.

**Want to learn more?**

[Visit our web site](#) for additional information.