



CHALLENGE:

EACH PAPER MACHINE IS OPERATED DIFFERENTLY

Many organizations are learning that defoamer-driven process control at scale is key to achieving the "mill of the future" vision. But when each machine, mill, and operator works differently, this level of standardization can seem like a pipe dream. It means unique strategies, instruments, and processes for controlling entrained air get used, leading to organizational misalignment and inefficiencies. Multiply this by the constant change happening in most mills—new systems, increasingly digital technologies, evolving product expectations—and air control can easily become a lower priority.

So, some mills keep doing what they've always done:

- Running trials, watching for spikes, and making manual measurements and defoamer adjustments—all with varied results.
- Implementing control technologies that are seen as
 maintenance heavy and prone to drift, which means operators
 don't trust the data they produce, and true adoption never
 really happens.

Meanwhile, onsite staff are tied up monitoring, cleaning, and calibrating these devices when you're trying to get more digital and automated.





EASILY INSTALL THE SAME CONTROLS EVERYWHERE



With easy-to-install Ackumen[™] ECHOWISE® Pro, you're able to **scale**, **standardize**, **and centralize your air control strategy** at any of your locations.

Mill leaders want standardization. But the logistics of getting measurement devices on the different brands and types of paper machines across locations—the unique configuration, labor, and shutdown requirements—often keep them stuck in their non-standard status quo.

When you partner with Buckman, you will implement the same entrained air control technology across your entire asset base—with minimal labor and no production impact.

ECHOWISE Pro was **designed to be non-intrusive**, going around a pipe rather than through it, which means it can be **installed on-the-fly in fewer than two hours**. Buckman experts fit it around a pipe, plug the sensor in, and calibrate, and you have a real-time feed of entrained air data.



AUTOMATE AIR CONTROL

With Ackumen™ ECHOWISE® Pro, you'll automate air control through a low-maintenance, non-wetted process that involves no moving parts.

Most measurement devices rely on sampling that comes in direct contact with the process, which can plug up and wear sensors out over time. Operators would rather shut them down and go to manual operation than deal with annoying maintenance requirements and data drift.

When you partner with Buckman, you will automate air control. ECHOWISE Pro has no moving parts, is installed around a pipe rather than through it, and uses sonar-based technology to take accurate entrained air readings with no direct exposure to the harsh conditions of your process. This means you can run continuously without interruptive and labor-intensive maintenance requirements.

You'll **reduce the burden on operators**, E&I, and process control groups, **while maintaining accurate and reliable entrained air readings** throughout. As a result, your staff will actually trust your process control, so you can drive standardization, further optimize operations, and capture new value from efficiencies and reduced maintenance costs.





GET OPERATORS ON BOARD AND ALIGNED

When operators don't trust air measurements, they're prone to go "off script" from a defined control strategy—tweaking the controls based on visual foam, adjusting the Couch vacuum, and generally doing what they feel is best. But "what's best" changes from operator to operator and shift to shift.

Thanks to entrained air expertise and support from Buckman, you'll be able to align your operators' actions and build confidence through KPIs and process control mechanisms—applying data-based insights to achieve optimal performance.

When you partner with Buckman, you will get operators on board and aligned through KPIs and process control. Buckman can also provide support through **data-based insights** gleaned from monitoring processes, using these findings to **implement control loops** that keep your assets and processes running at peak performance. As a result, you'll build operator confidence and free them to focus on other work, while **centralizing best practices for air control and drainage** across your organization.



STANDARDIZE YOUR AIR CONTROL STRATEGY

When you partner with Buckman, you'll be able to minimize air's influence on the papermaking process to achieve the level of control that's essential for operating like a mill of the future.

Specifically, you'll be able to:



Easily install the same controls everywhere



Automate air control



Get operators on board and aligned

Join leading organizations in operating more consistently and predictably to achieve higher-quality production at a lower cost.



For more information, visit us online.

