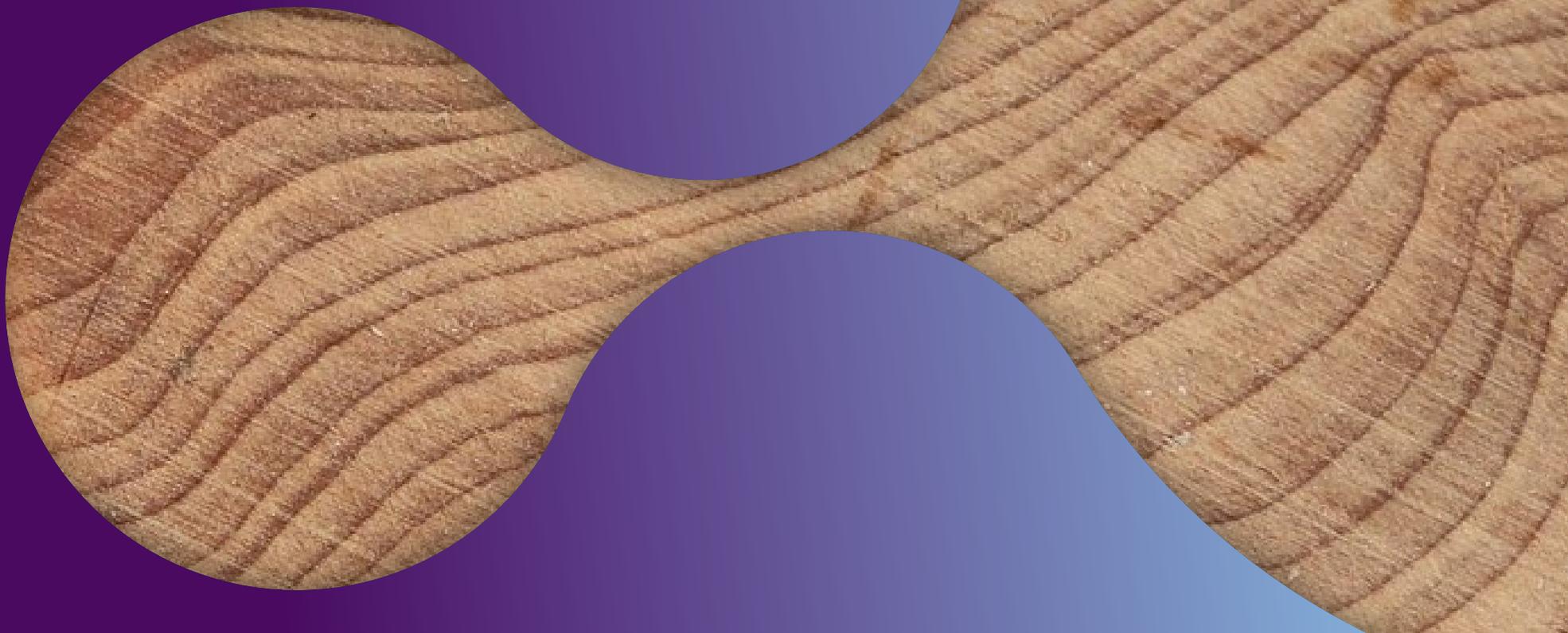


How Do You Improve Brown Stock Washing

When Your Processes Mask Its Inefficiencies?





The Challenge:

Current processes and metrics obscure deeper BSW issues

Your mill's operators and engineers are entrusted with an immense amount of responsibility and oversight, but they can only monitor so many things. They're usually so tied up keeping processes running and fighting fires that they don't have time—or the chemistry background—to evaluate hidden brown stock washing (BSW) issues. So if conductivity looks good and foam isn't an issue, they check that box and move on to the next items on their list.

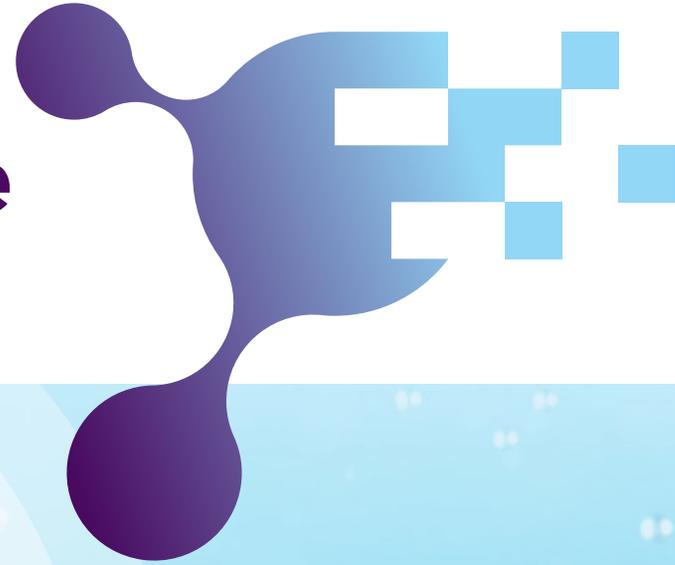
The problem is, conductivity and foam control don't tell the full story of washing performance. Conductivity, for instance, wouldn't show if you're using too much wash water. But this could result in excessive weak black liquor in your evaporator plant, leading to production bottlenecks and elevated energy usage. Although drainage and exit consistency are better predictors of effective BSW, few mills can calculate such metrics. This means they may not know their mill's true capacity, and they're potentially wasting high-value production opportunities each time they're evaporator limited or experience cleaning machine deposits.

Some modern mechanical pulp facilities recover steam from the refiners and use it at the paper machine.

**In Finland and Sweden,
25% and 50%
of electricity use is recovered
as steam, respectively.¹**

The Solution:

Redefine successful washing everywhere



If your mill relies on past practices and incomplete markers to gauge BSW performance, you're missing hidden problems that could limit production possibilities and reduce your competitiveness.

But when you partner with Buckman, you'll be empowered to **redefine what constitutes successful washing across all of your mills.**

Here's how you can make it happen >>

Uncover and solve root causes of foaming issues

Things are changing all the time in your mill, but if you're following the same general configurations year after year—across formulations, dosing points, volumes, etc.—swapping in a cheaper product won't increase long-term performance. In fact, it's likely to create new up- or downstream problems you may not have the expertise or capital to fix.

When you partner with Buckman's team of experts, **you'll uncover and solve the root causes of inefficient washing**, so you can increase BSW output. Rather than focus on the commercial aspects of defoamer, Buckman takes a more technical, scientific approach: applying a unique combination

of BSW expertise and customer intimacy, so you can target the real bottlenecks in your process, such as evaporator load or machine deposits.

And depending on your goals—more production, higher quality or both—you'll work with Buckman's experts to identify the right washing aid and dosing configurations for your needs. As a result, you'll increase drainage and washer exit consistencies, so you can safely expand your process window—without spending capital on new equipment or worrying about creating bottlenecks for your colleagues in other parts of the process.

Buckman's **scientific approach** is built around a unique combination of **BSW expertise, customer intimacy, unique sensors and technical support for uncovering process bottlenecks.**

Apply the right wash aid in the right spot—in any region

Even though defoamers are often seen as commodity products, they can create issues if they're applied in generalized ways. For example, defoamer interacts differently with hardwood and softwood, so the same product or dosing configurations may not work across regions. And if the answer is to just increase the application points to account for variations, you risk over-using defoamer and experiencing costly carryover and deposits.

When you work with Buckman, **you'll apply exactly the right wash aid in the right points of your process, no matter where your mills operate.** This is because Buckman tailors the product application in two important ways: First, with a formulation

designed for your type of wood. And second, with a custom surfactant system that optimizes dispersibility at the most important parts of your operation.

This means you can control foam and improve drainage faster, while actually reducing the number of application points and volume of wash aid needed. Fewer pumps equal less chance of breakdowns or inadvertent overdosing. What's more, you'll get more performance out of every type of wood—soft or hard—you use across your mills, without having to source regional defoamers from different suppliers.

Buckman's tailored application delivers wash aid formulations designed for local wood stock with a specialized surfactant system for optimum dispersibility.

When you collaborate with Buckman's BSW experts, you'll...



Accelerate drainage
and increase washer exit
consistencies



Safely expand your
process window—without
allocating capital to
new equipment or worrying
about downstream issues



**Improve foam control
and drainage**, so you can
get more performance out
of your type of wood

Ready to get started? **Check us out online**
to read more about how Buckman can help your mill.