Sawmill Challenges and Solutions

Hardwood. Timber. Lumber. These are things that people have used for centuries. Wood has been a part of civilization since cavemen first discovered they could use it to create tools, fire, and shelter. The lumber industry (as we know it) was born in the 3rd century, when the first sawmill was created. What began as a tiny water-powered stone mill has turned into a highly technical, multi-billion-dollar industry that plays a key role in economies across the globe.

Sawmill operators face a slew of challenges every day, from keeping up with new technologies to ensuring quality control. Challenges they have to face while safeguarding their employees and the mills at the same time. These are not insurmountable challenges.

Safety is always a challenge for sawmill operators, and while safety isn't the most glamorous part of sawmill operations, it is one of the most important. NHLA member Anthony "Robin" Little, Vice President / Program Director of McGriff Insurance Services, says, "Most of the companies we visit have great safety programs and do an outstanding job of making safety a priority. However, we do find some operations that have a well-written safety manual but fail to follow their own written procedures, and do not consistently communicate the policies to all employees. It is absolutely essential that senior management makes a solid commitment to ensuring safety procedures are followed. This includes requiring documentation and assuring that procedures are being followed. Accountability and consequences for non-compliance must also be communicated throughout the company."

Robin warns that sawmills need to make certain challenges a top priority. Drug testing, for example. The current opioid crisis can have a dramatic impact on the safety of your employees and your mill. An employee that is incapacitated by drugs is an employee that is likely to make costly mistakes. These mistakes can jeopardize the safety of both the employee and others around him.

Aside from drug testing, Robin also warns there are other concerns that often get overlooked by sawmill operators. Concerns they should take time to consider, like being aware of different lifestyle, cultural, and diversity issues; preventing workplace violence and harassment; and planning for the future since the workforce is aging.

NHLA member Corey Bounds with Continental Underwriters Inc. warns there are five key safety issues that sawmill operators need to keep in mind:

1. Heat monitoring and control
2. Fuel minimization through the acts of dust & debris removal, containment of combustible fluids, and management of sprinkler/suppression systems;
3. Planning & preparing for catastrophic scenarios
4. Vendor & Subcontractor Liability; and
5. Worker safety & employee preparation.

Bounds also says, "Safety concerns need to be real and true. Not something you do solely for your insurance company or OSHA. Safety concerns should be approached as an investment protection."

Fortunately, there are new technologies being created with the idea of sawmill safety in mind. One of the emerging technologies is a new fire-resistant hydraulic fluid (FRHF) designed to lessen the risk of fire at mills. Hydraulic fluid is a source of fuel, and the risk of fire is enhanced by the presence of other combustible material such as wood, bark, and saw dust. Those hazards, combined with remote locations for many mills, make controlling fire threats a top priority.

The industrial lubricant manufacturer, Isel, has developed a new hydraulic fluid that is based on chemical additives rather than water. These additives prevent the fluid from forming a flammable mist in the event of a leak, which can measurably increase sawmill's safety. The new fire-resistant hydraulic fluid also provides a thick, lubricating film, which helps ensure proper wear-protection for machinery as well as a long component life.

NHLA member, MM Industrial Sales, provides this new fire-resistant hydraulic fluid to sawmills and equipment manufactures under the brand-name MM-2584. Owner Mark Mitchell says that all sawmills should be using this fluid because, "it's not IF a sawmill will catch on fire, it's WHEN."

As sawmill operators navigate the challenge of safety, the need for quality control is also a focus. Quality control in manufacturing has been a focus for many industries since the early 1970's when auto manufacturers faced threats from imports that were superior in reliability. These imports eliminated a great deal of manufacturing jobs. The sawmill side of the hardwood industry has avoided this threat until recently, with the rise of log exports. In reaction, NHLA created a new Yield Analysis program that focuses on lost profit recovery.

The Yield Analysis program, run by NHLA Chief Inspector Dana Spessert and his team, evaluates which log diameter and grade is the most lucrative, allowing sawmills to focus their buying strategies on purchasing logs that will generate the highest profits. Considering as much as 85% of a sawmill's overall costs are spent on raw materials, this program is a game-changer.

When beta testing the Yield Analysis program earlier this year, NHLA was able to identify an average revenue increase of $430,000 per mill. According to Spessert, "Quality control testing will provide each sawmill with the time needed to concentrate on their mill's other needs, like safety, employee training and equipment repair/replacement. These small details can result in large returns and allow companies to manage their operations more efficiently."

The hardwood industry has come a long way since that first water-powered sawmill 2,000 years ago. It has bravely faced new challenges over the centuries, and will continue to do so by discovering new solutions and developing new technology.