

The new ModuScreen T4C screen from ANDRITZ played a central role in the rebuild of the preliminary screening plant. This special, two-stage tailing screen operates with centripetal force in the lower area with a rotating screen basket perforation diameter of 2.0 mm and with centrifugal force in the top section under atmospheric pressure with a screen basket hole diameter of 2.2 mm. It is not sensitive to spinning and keeps the fiber content in the reject to a minimum. With good screening efficiency, the reject leaves the screen with a high dryness of approximately 20%.

The new ANDRITZ ModuScreen A44 in the fine screening plant has achieved excellent screening as a result of the special screen basket/rotor concept. The new Bar-Tec rejector screen baskets used in coarse screening (slot width 0.4 mm) with patented bar profile achieve better removal of impurities compared to the perforated screen baskets used so far and feature low energy consumption.

In order to secure the energy savings of over 20% as agreed in the contract, a few optimiza-

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SEBASTIAN STOCKFISCH
Head of deinking and effluent treatment, LEIPA



tions were needed first of all, but were completed quickly. "There are always small snags in any project. But everything was resolved very well overall," Gerhard Laue, LEIPA project manager, confirms satisfactory execution of the project. "At last, we no longer have to think about screening any more after this rebuild – that is certainly the biggest compliment for ANDRITZ as supplier."

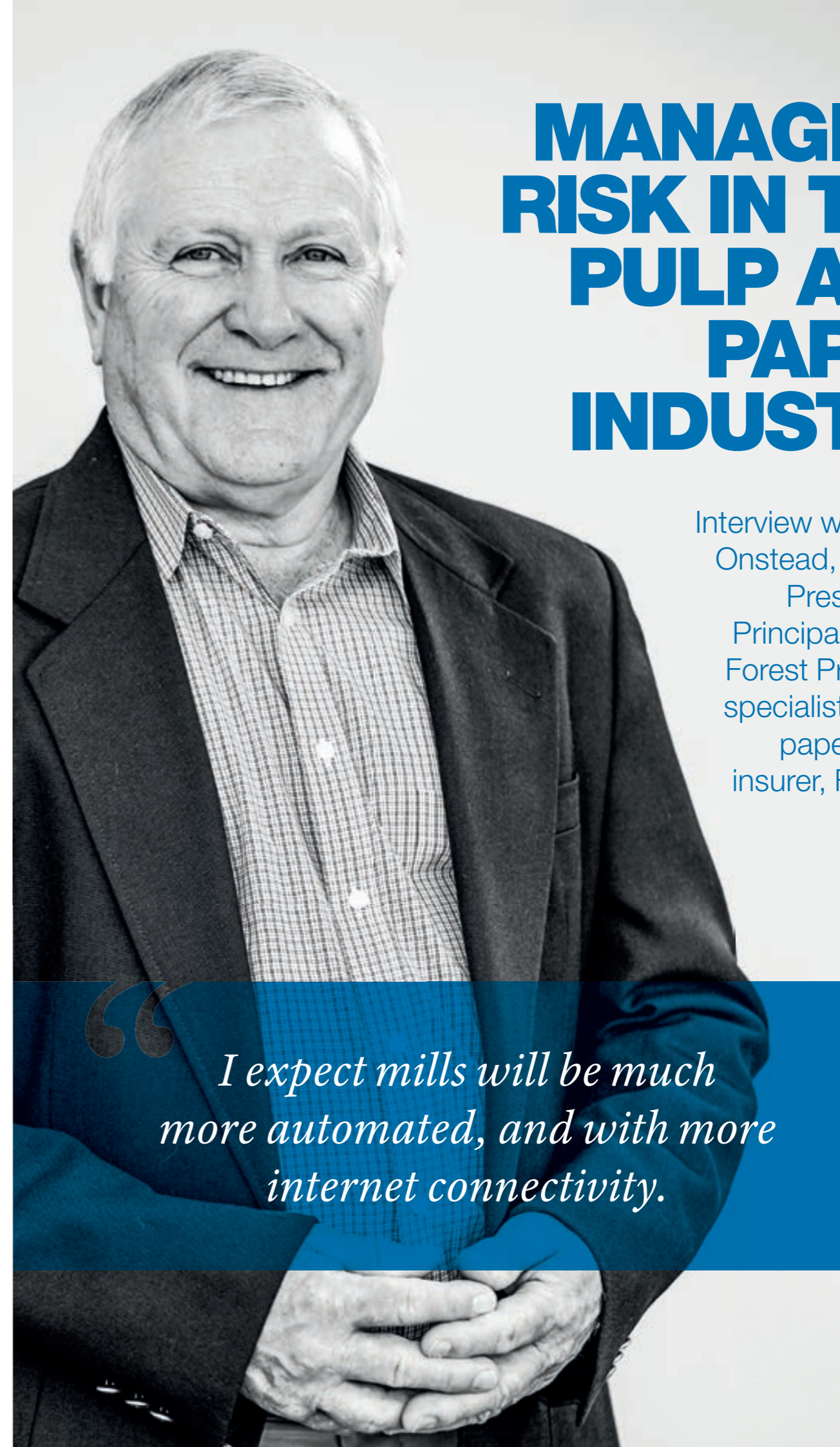
"Just like the screw press rebuild in 2013, this optimization demonstrated that changes to individual units or sub-systems influence the ecological footprint of the entire company," Stockfisch concludes.

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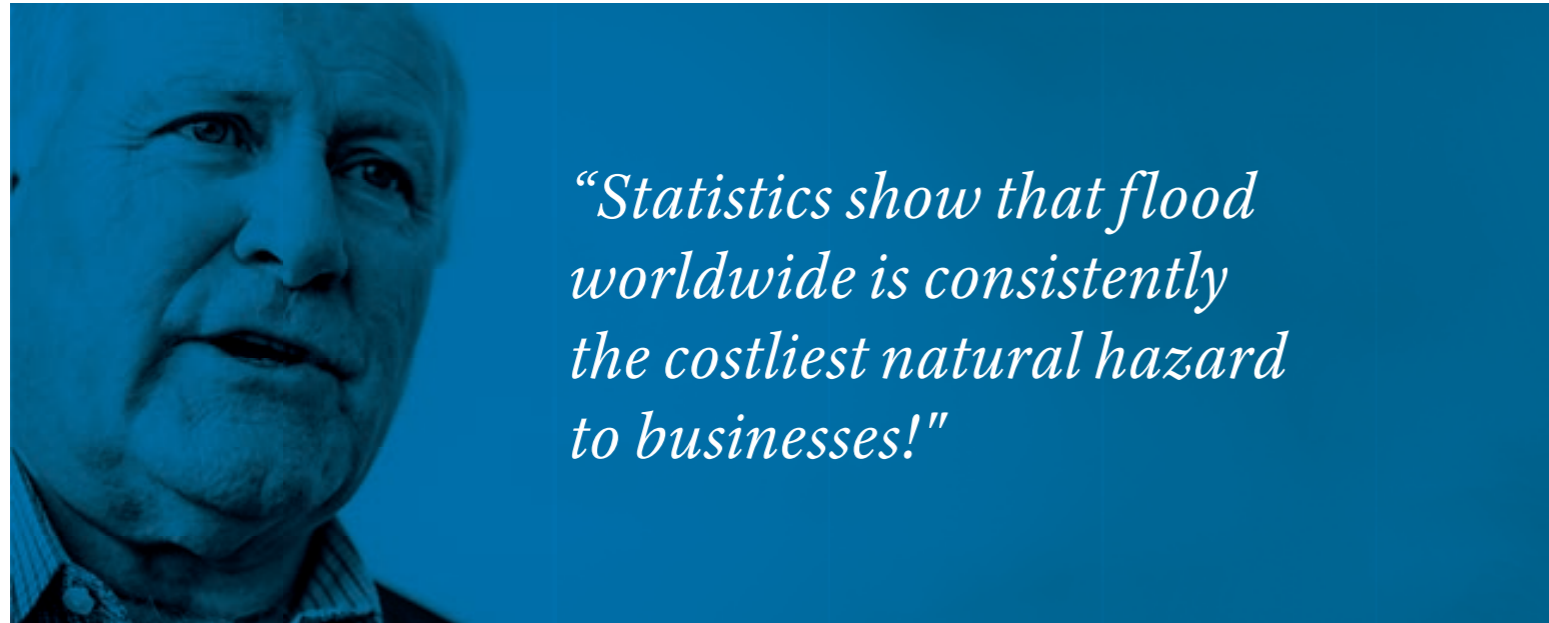


MANAGING RISK IN THE PULP AND PAPER INDUSTRY

Interview with Jimmy Onstead, Staff Vice President and Principal Engineer Forest Products at specialist pulp and paper industry insurer, FM Global



"I expect mills will be much more automated, and with more internet connectivity."



“Statistics show that flood worldwide is consistently the costliest natural hazard to businesses!”

CURRENT RISKS CHALLENGES AT MILLS

J. Onstead: “Well, that list can be pretty extensive, but at the mill level it involves a constant, proactive approach of inspection, testing, and maintenance of equipment. Fire protection is a big issue because there is a lot of exposure in the industry as a result of pulp and paper storage and the manufacturing process. There also are risks to equipment such as boilers, pressure vessels, and mechanical and electrical systems. Maintaining the integrity of such equipment can be a daily challenge for mill owners.”

IMPORTANCE OF EQUIPMENT BUILD QUALITY

J. Onstead: “Our clients must protect their market share, margins, and reputation. Equipment used in the pulp and paper industry is expensive and having top-of-the-line products that meet the highest loss prevention standards is essential. For recovery boilers, the three standards that drive design come from BLRBAC in the United States, the Swedish Norwegian Recovery Boiler Committee in Sweden, and the Finnish Recovery Boiler Committee in Finland.”

OPERATOR TRAINING

J. Onstead: “Operator training is essential,

especially with regard to addressing common causes of industry losses. Almost all losses today can be attributed, at some level, to human factors – those actions people did or did not do. Certainly, a loss may start with mechanical damage or fire, but what the operators do in terms of their reaction during such events can make the situation worse or better. It is a constant struggle for many organizations to ensure their operators are properly trained. A mill’s employees are probably the most important factor when it comes to managing risk.”

CATASTROPHIC EVENTS

J. Onstead: “Depending on the peril, there are steps that can be taken. When it comes to natural hazards, flood and wind exposure come to many people’s minds. However, earthquakes and tsunamis should be considered, too. The first step is knowing and understanding your risk before the construction of a plant, if possible. Can you build the facility out of harm’s way? Relocate it? If not, then what can you do to design and protect as much as possible of the facility against property-related threats, followed by a comprehensive and tested response plan should an event occur.”

INCREASED CHANCE OF FLOODING

J. Onstead: “Natural hazards are

classified by the type of damage caused: wind, flood, freeze, hail, collapse, tornado, and earthquake. Our statistics show that floods worldwide are consistently the costliest natural hazard to businesses. Today, due to increased urbanization, flooding is occurring in places where it hasn’t in the past. When I look at how much of the topography has been changed by ongoing development such as concrete, roads, you name it, changes have been made to the natural storm water drainage that traditionally protected locations. I expect to see floods continue to increase. To help companies address these challenges, we recently released our online Global Flood Map, available at no cost for use by businesses and the public. It helps a user understand whether their locations are in or out of potential flood zones across the globe, even in areas where previously available information was unreliable, inconsistent, or nonexistent.”

THREATS FROM INSIDE THE MILL

J. Onstead: “These are the types of everyday risks a pulp and paper mill deals with. However, the mills can take steps to prevent loss. Much of this begins with inspection, identifying and quantifying exposure, and applying engineering solutions that help prevent or mitigate



the risk. I suggest finding a company like FM Global who have risk engineering expertise.”

CYBER ATTACKS

J. Onstead: “Cyber risk is a growing concern for businesses. Last year, FM Global formed integrated engineering and underwriting units dedicated to enhancing the company’s expertise in first-party cyber solutions. Currently, our company’s research and engineering units are developing location- and account-based assessment standards, tools, and methodologies to assist clients with cyber risk mitigation. And, we are continuously enhancing our cyber insurance coverage to help ensure our clients are protected. We don’t often think of a paper mill as being a target for cyber attack, but we have already seen instances in the industry where, for example, disgruntled employees, perhaps IT people, have gone in and attacked a company, which resulted in physical damage.”

THE MILL OF THE FUTURE

J. Onstead: “The future new mill will look so different from anything that I can possibly imagine. I expect mills will be much more automated, and with more internet connectivity. That will bring with it

new property exposures, too. With more automation, we are likely to see increased cyber risk, less people in the mill operating equipment, more major control centers, and fewer people making adjustments to equipment.”

LESS PEOPLE, LESS RISK?

J. Onstead: “We still need people to go out there and listen, look, and touch. When it comes to sound risk management, there are some things that automation just can’t replace.”

WHERE SHOULD MILL OWNERS BEGIN?

J. Onstead: “Mill owners and managers should begin with their people. There will be a lot of challenges in the future with regard to new hires – finding talent and attracting the right people to the pulp and paper industry. Training those people properly will be critical and knowledge transfer from seasoned veterans with much institutional knowledge will be imperative. Then other programs naturally fall into place such as system design, maintenance, and repair of systems. Lastly, make sure you have a good insurance company and partner in loss prevention!”

WHAT DOES FM GLOBAL DO?

FM Global is one of the world’s largest commercial property insurers and has a unique risk management focus – utilizing loss prevention engineering to help clients be more resilient. In the pulp and paper industry, breakdown and failures of boilers and machinery are commonplace so we help clients prevent loss from perils like fire, natural hazards, and equipment breakdown, as well as insure against it. As a mutual company, we are owned by our policyholders and we believe in long-term partnerships with our clients – most are 20+ years upwards to 135-year relationships.

Watch the whole video interview:

