

After 10 years, TransRoll keeps on rolling...

In 2006, Pesimal delivered a TransRoll storage system to a pulp and paper mill in Indonesia operated by Riau Andalan Pulp & Paper. After almost a decade in operation, the system is still running smoothly and reliably – and it should continue to do so for decades more. Of course, maintaining a complex system like TransRoll isn't the simplest operation, but Pesimal are happy to cooperate with customers with long-term service to help them keep their rolls moving.



Mr. Wahyu Setiady,
finishing manager
of the Riau Andalan
Pulp & Paper mill

PHOTO: PESMEL

Riau Andalan Pulp & Paper (RAPP) is part of Indonesia's APRIL Group. RAPP operates mainly around the town of Pangkalan Kerinci on the island of Sumatra. The mill is one of the group's main subsidiaries, and APRIL also has a number of plantations that supply the raw materials for its operations. APRIL makes pulp and paper products that are used by millions of people every day in packaging for liquids, printing and writing paper, tissues, shopping bags, food packaging, magazines, and books.

The RAPP mill is among the five most efficient such mills in the world. It produces 2.8 million tonnes of bleached acacia kraft pulp and more than 1.1 million tonnes of paper every year, mainly copy and offset papers, digital printing grades sold in sheets, and customer rolls. Its customers include offset printing houses, book converters, governments, banks, and large retail chains. It sells its products in over 70 countries around the world, with the bulk of its operations taking place in Asia.

TransRoll at RAPP

The solution that Pesimal created for RAPP is an automated, high-density, deep-lane intermediate storage system for paper rolls. It features a rack-supported storage facility and uses two automated stacker cranes with shuttle vehicles. At RAPP, TransRoll has two functions: it serves as intermediate storage for rolls that come from the paper machines and are destined for the converting plant, and it is also a warehouse for finished rolls that are sold directly to customers.

This order was the first agreement between APRIL Group and Pesimal. APRIL carefully examined several possible solutions before making their choice. At the time, one of the major contributing factors in the decision was TransRoll's capacity and throughput. "Capacity was key. Nobody else could match the required in/out capacity," says Mr. Wahyu Setiady, finishing manager at RAPP. TransRoll has provided a number of other benefits at the mill: it saves space, it has reduced the manpower required, fewer forklifts are needed, and loading containers is now much faster. The RAPP mill has had no major problems with the system since it was installed nine years ago. In fact, the system has proved to be more reliable than a different system used in a nearby warehouse, and APRIL were so pleased with their TransRoll system that they ordered another, larger system for a mill in Guangzhou, China as well.

Long-term reliability through proper maintenance

Pesimal has a lot of experience in this field, and it knows how to produce reliable systems. With proper care and maintenance, a TransRoll system will run for at least 15 years, and possibly well over 20, before any major upgrades are required. After such an upgrade, customers can expect it to continue running smoothly for a similar amount of time. Components in TransRoll systems from other suppliers are just as reliable – some TransRoll systems have cranes supplied over 25 years ago that are still running smoothly.

Keeping any system running smoothly requires maintenance, and any industrial expert will tell you that prevention is better than cure. Properly planning, scheduling and conducting an effective preventive maintenance program is important. Doing things properly keeps the amount of maintenance required to the minimum, and the old-school "run-to-failure" model of maintenance simply isn't an option for a system like TransRoll.

Keeping TransRoll rolling

Properly maintaining a TransRoll system requires special skills and good planning. Pesimal have provided RAPP with good instructions and training in the steps that need to be taken, giving them the ability to handle everyday maintenance and preventive measures themselves. "It is special equipment that requires special training, so every visit is a training visit as well. It requires well-planned maintenance and a focus on minimizing dead stock," says Wahyu Setiady. The basic elements of the preventive maintenance program include making sure that all the bearings are properly greased, and that all the chains and rolling parts are properly lubricated.

Parts that are wearing out also need to be replaced. The wheels on the TransRoll cars are made of polyurethane. While this is a tough plastic, it does eventually wear out. The carbon parts of the current collectors, which convey the electric current from the rails to the cranes, also wear and need to be replaced. RAPP's own technicians take care of these actions themselves as part of the regular monthly maintenance program.

Pesimal is always eager to provide good service to all its customers. Engineers from Pesimal visit the RAPP mill at least once a year for more involved maintenance activities, such as making adjustments to the frequency converters and sensors, and checking the condition of electrical components. They also use specialized equipment to examine the condition of the fieldbuses every few years.

Looking further ahead in the life cycle

After nine years of operation, there is still no need to consider any major upgrades to the system. Eventually, this will need to happen – when, for example, the PLCs or frequency converters are no longer supported by the manufacturer. Even then, the team from Pesimal try to adapt and reuse things like control software as much as possible, rather than rewriting it, to simplify the process.

The environment in Riau is quite humid and rainy, but this has not affected the reliability of their TransRoll solution. TransRoll systems are always built to be robust: Pesimal's engineers always consider the operating environment – temperature (hot or cold), humidity, dust, etc. – and choose appropriate components and subsystems to make sure their TransRoll solutions keep on rolling.

It's not only the efficiency and capacity of TransRoll itself that keeps customers happy and coming back, it's also Pesimal's exceptional customer service and proactive attitude to servicing and maintenance. •