

INDUSTRIAL CRANES

NUCLEAR CRANES

PORT CRANES

HEAVY-DUTY LIFT TRUCKS

SERVICE

MACHINE TOOL SERVICE

PULP AND PAPER INDUSTRY

**KONECRANES**<sup>®</sup>  
Lifting Businesses™

# SMART HANDLING FOR THE PULP AND PAPER INDUSTRY



# KONECRANES IS EVERYWHERE IN THE PAPER INDUSTRY

## Proven solutions for every stage in pulp and paper making

Some of our earliest successes occurred over seventy years ago, when we developed lifting solutions for customers in the pulp and paper industry. Our expertise in the field has grown steadily since then, and today we are recognized worldwide as the authority on lifting for pulp and paper applications.

## Knowledge at your service

Our reputation is the direct result of providing the highest lifecycle value for our customers in this industry. We offer proven know-how, lifting solutions and service.

## World-class

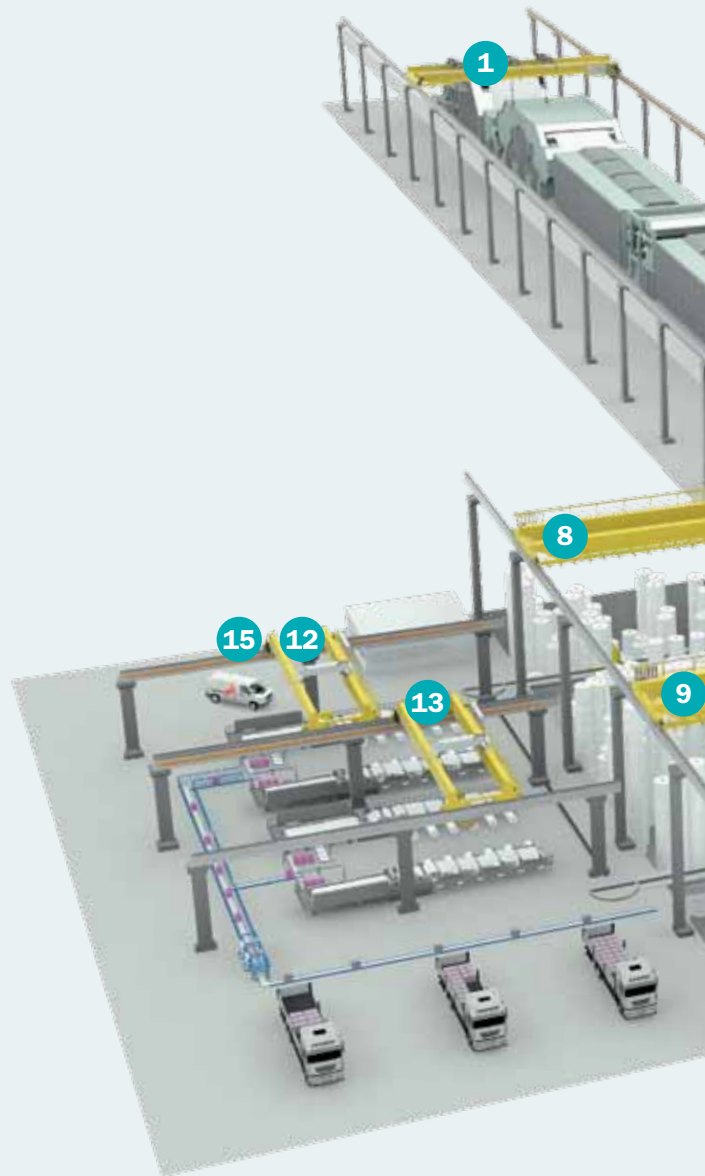
Our solution designers understand the demanding environment in which pulp and paper are made. They work closely with machine builders, pulp and paper makers and engineering companies to provide high-quality cranes and lifting systems specifically for the pulp and paper industry, based on a common global product platform.

## A local touch

We are committed to providing service with a local presence that is trustworthy and fast.

## NOT JUST LIFTING THINGS, BUT ENTIRE BUSINESSES

Konecranes is an industry-leading group of lifting businesses that offers a complete range of advanced lifting solutions to many different industries worldwide. We are committed to providing you with specialized lifting equipment and services that increase the value and effectiveness of your business. When you choose Konecranes, you acquire a unique source of global experience and knowledge combined with local know-how to empower your lifting solution.



- 1 Wet end crane
- 2 Automatic parent roll handling
- 3 Dry end crane
- 4 Winder crane
- 5 Roll wrapping crane
- 6 Core tube storage crane
- 7 Core handling jib crane
- 8-9 Automatic intermediate roll storage
- 10-11 Automatic shipping storage
- 12-13 Sheet cutting area roll handling cranes
- 14 Lift trucks
- 15 On-site Konecranes Service
- 16 Workshop crane
- 17-18 Warehouse Management System  
Remote Monitoring System

# SMART CRANES DO MORE

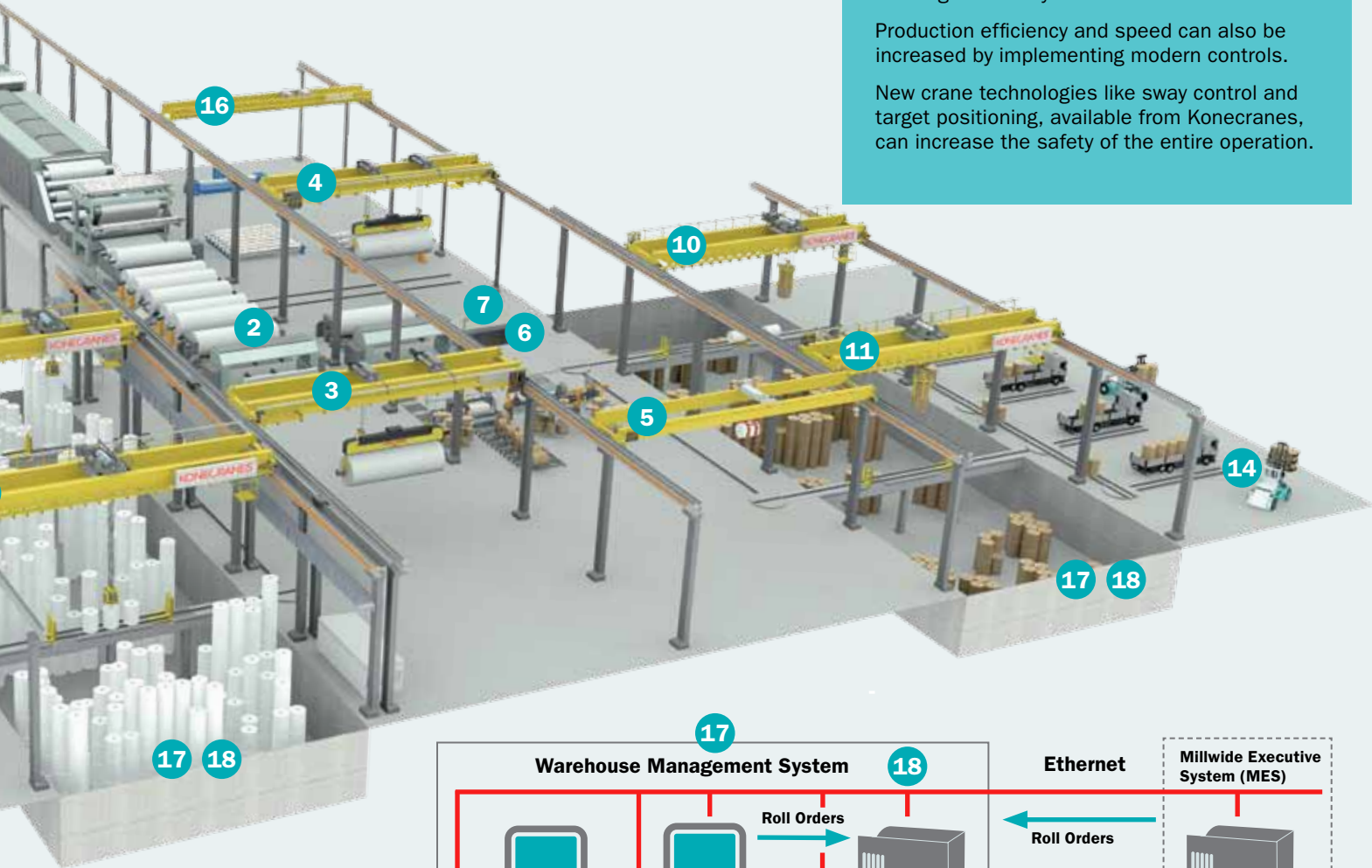
## Smart cranes cost less in the long run

If you upgrade your paper machines, your crane usage will intensify -- greater lifting capacity is needed to lift bigger paper rolls.

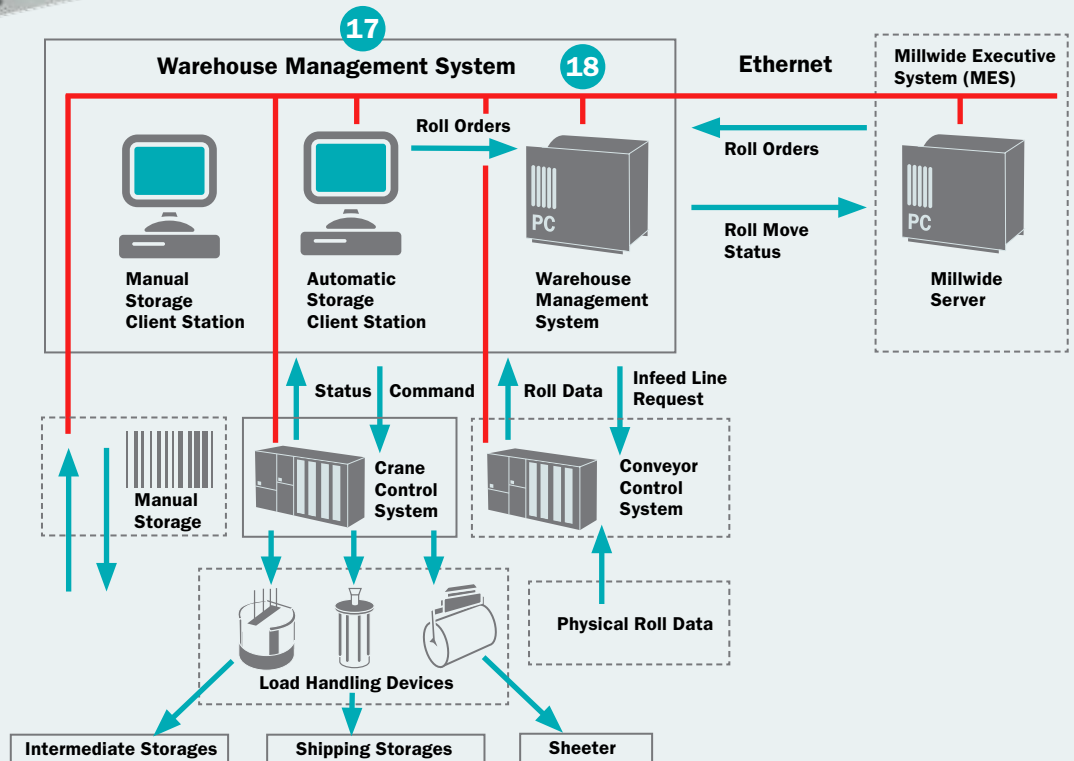
You can overhaul your existing cranes to achieve the needed increases in performance and productivity, or completely replace the hoisting machinery.

Production efficiency and speed can also be increased by implementing modern controls.

New crane technologies like sway control and target positioning, available from Konecranes, can increase the safety of the entire operation.



1-6 and 12-16 Konecranes TRUCONNECT® Remote Services





# CUSTOM SOLUTIONS THAT BENEFIT YOUR BOTTOM LINE

## THIS UPGRADE SAVED TIME AND MONEY

### Customer challenge

#### Weyerhaeuser, Washington (USA)

Weyerhaeuser was having problems with a reel crane: load brakes were failing and pinion gears and cables were wearing, resulting in crane downtime. The costs were becoming significant.

### Our solution

We modernized the crane by reinforcing the gantry and adding an eddy-current load brake and a motor with variable excitation eddy-current braking. We also added a new hoist with precision gearing, and a new bolt-on-drum construction that allowed the drum to be removed without taking apart the hoist machinery.

We also installed new rope, sheaves, bottom blocks, spreader beams and reel hooks, and improved the rope fleet angles to increase rope life.

To save valuable time, we preassembled the hoist machinery in our factory and installed it quickly at the customer's premises.

### Benefits

This modernization saved Weyerhaeuser the time and expense that replacing the reel crane would have involved.





## A SMART SOLUTION FOR THE TISSUE PAPER INDUSTRY

In Europe, the soft tissue converting industry specializes in disposable paper products and hygienic dispensing systems and may produce millions of rolls a week. Konecranes automatic crane technology now offers a significant efficiency upgrade for this already highly automated sector.

With the Konecranes solution in place, the load crane at the beginning of the process lifts and moves each paper roll into the right position automatically. No human guidance is required. The same crane can also be programmed to remove the empty paper cores from the rewinder. This is a significant advantage: almost 600 meters of paper are rolled per minute, and the roll needs to be changed every thirty minutes.

### Up to 1.5 hours saved per day

The most significant advantage provided by the Konecranes solution is the increased speed of roll change – converting lines usually operate non-stop, seven days per week. Roll change time is shortened to about two minutes, which adds up to 1.5 hours of time saved per day.

And the solution ensures that the roll changes – and therefore the process – proceed in a steady and consistent fashion. The automatic nature of the process allows the machine operator to concentrate on other tasks. Human errors are minimized, which improves quality. And worker safety is improved, since the rewinder can be operated from a safe distance.

“ We see Konecranes as a strong partner. Not only as a supplier of cranes, but a long-term partner with great maintenance services. ”

Konecranes Paper customer  
Mr. Muraji Nishi, General Manager  
Construction Div. Paper Machine Team  
Jiangsu Oji Paper Co.,Ltd



## EXCELLENT ENGINEERING, PROVEN RESULTS

### Developed specifically for the pulp and paper industry

Konecranes lifting solutions for the pulp and paper industry set the industry benchmark. Our offering includes:

- Installation
- Maintenance
- Wet end
- Dry end
- Winder
- Roll grinding workshops
- Paper roll handling
- Automatic storage systems
- Automatic jumbo roll handling
- Workstation cranes
- Core handling crane
- Monorail hoists
- Heavy-duty lift trucks
- Remote diagnostics
- Site services

### Special products for the pulp and paper industry

Whether for new facilities or factory retrofits, Konecranes solutions put every square meter of space to use. Our cranes and wire rope hoists offer significant innovations that deliver increased safety and maintainability.

The CXT wire rope hoist uses a rope drum that's large in diameter but short in length. The larger diameter means less wear on ropes and lower maintenance costs.



Our SMARTON® crane for the pulp and paper industry offers a teachable positioning feature to assist the operator and energy feedback that saves up to 30 % in energy consumption when compared to machines that lack this feature.





## **KONECRANES SERVICE – ON A LEVEL SUITED TO YOU**

Our five service levels define the relationship and cooperation with you and they all aim at raising total life cycle value. From first CONTACT, to our professional evaluation of the CONDITION of your equipment, to preventive maintenance and consultation services for optimal CARE, Konecranes will tailor a program to lift your business.

When a mutual COMMITMENT to performance-based maintenance or COMPLETE material handling outsourcing is required, Konecranes has the experience and resources to help you meet your business objectives.

### **Care**

A selection of inspection and preventive maintenance services.

### **Commitment**

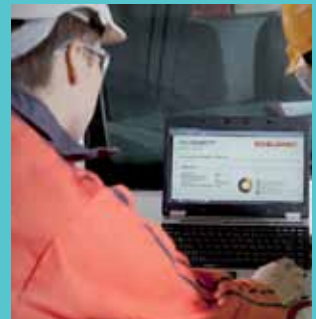
Full-scale maintenance operations with set common targets.

### **Complete**

Full responsibility of crane operations, with equipment, maintenance and personnel.

## **THE FUTURE OF MAINTENANCE IS HERE TODAY WITH TRUCONNECT® REMOTE SERVICES**

Remote Monitoring and Reporting service monitors the real usage of your equipment through a remote connection. Using the available usage data we provide you with information that can help you increase the safety of your crane usage, optimize your maintenance spending, and plan and budget your crane fleet's modernization needs in advance.





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Konecranes is a world-leading group of Lifting Businesses™ offering lifting equipment and services that improve productivity in a wide variety of industries. The company is listed on NASDAQ OMX Helsinki Ltd (symbol: KCR1V). With over 11,500 employees at more than 600 locations in almost 50 countries we have the resources, technology and determination to deliver on the promise of Lifting Businesses™.

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