



## 5 PAIN POINTS IN PAPER HANDLING (AND WHAT YOU CAN DO ABOUT THEM)

**F**ew products as commonplace as paper go through such an extensive lifecycle. From the forest as raw material, to the pulp mill, paper mill, printing house, warehouse, port or terminal, or logistics operation before its final distribution as whatever finished paper product it becomes. And that's not to mention the recycling of paper products.

So, it is no surprise, perhaps, that throughout the supply chain, there are a number of pain points that applications must contend with when handling paper. We'll look primarily at paper rolls and recycled paper, to consider the key factors affecting operations and possible materials handling solutions to the most common challenges.

**// THE PAPER LANDSCAPE IS CHANGING**  
Global paper production was estimated to reach 490 million tonnes in 2020\*. Research predicts the consumption of specialty papers to reach 28.02 million

tonnes in 2024\*\* and other statistics predict that demand for graphic paper types will remain stable, though tissue, packaging papers, hardwood, and softwood pulp are predicted to rise by 2% from 2016 to 2021\*\*\*. However, 2020 - 2021 has not been without fresh challenges and unexpected changes due to the Covid-19 pandemic.

One point of note is the big surge experienced for hygiene products, such as paper wipes, tissues, and towels, as well as hygienic and sterile paper packaging, and in turn the recycling of all these products. Keyworkers have kept working to keep recycling centres running throughout the pandemic. In terms of recycling more generally, countries in Europe are among the biggest recyclers in the world, with paper packaging playing a large part. The European Union's new recycling target is to achieve 65% by 2025, and to recycle 75% of recovered packaging material by 2030.



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However, it is the end consumer that is driving the trend towards recyclable products hardest. Expectations are for pulp, paper, and fibre products to be recyclable, so businesses must look at alternative protective coatings, instead of traditional waterproof coatings which prevent the materials from being recycled.

There is also a distinct move from plastic to paper globally, with some countries banning certain single use plastics, such as plastic drinking straws, in a move to be more sustainable. In fact, the push for sustainability efforts is among the biggest trends affecting the industry.

### // CHALLENGE 1. BEING SUSTAINABLE IS HARD

In the past, the paper industry has had a bad reputation with environmentalists due to deforestation. However, now, businesses are looking at far more than just replanting to restore their green credentials. The paper industry is demonstrating a growing commitment to recycling and looking at areas such as alternative energy sources. But how can materials handling be more sustainable?

Electric lift trucks can help support operations in making the move to zero emissions operation, supporting a lower carbon footprint. This is potentially a very big green benefit when you consider that paper mills often run a 24/7 operation, but traditionally some businesses have been resistant to electric materials handling equipment, assuming that it will not suit the toughest applications.

However, the newest generation of electric lift trucks, with a range of battery and charging options and the ability to lift ever heavier loads, are striking a balance that enables businesses to prove their green credentials to customers, while still getting the job done

productively. As well as better air quality and quieter operations, the option of lithium-ion electric trucks also removes the requirements for costly lead acid battery maintenance and specific charging infrastructure

## ELECTRIC FORKLIFT CONSIDERATIONS

8-tonne lift capacity trucks are common in the paper industry. When making a switch to electric at this capacity, look for high voltage trucks that have the power and endurance for the specific application and that can deliver a comparable performance to IC trucks. Strict routines and processes may also need to be adopted to allow for charging during breaks.





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### // CHALLENGE 2. KEEPING PEOPLE SAFE

The safety of the workforce is a high priority to many paper applications. There are pressures to increase productivity and output to meet targets, while load sizes increase, rolls must be stacked at greater height to maximise storage, and weather continues to be a difficulty in outdoor operations. Recycling bales are also increasing in size.

However, combined with correctly trained operators, the right materials handling equipment will support operational safety. In paper handling applications, drivers are often in a lift truck for a long shift, so comfort is important when selecting equipment. In addition, it is important for customers to carefully evaluate their specific work environment to understand what additional special features – such as telematics, cameras, and object detection systems – may help support site-specific safety initiatives.

### // CHALLENGE 3. REDUCING PRODUCT DAMAGE

As the home delivery market has boomed during Covid-19, usage of certain types of packaging has inevitably increased – everything from online retail parcels to takeaway boxes. With even more direct to consumer sales, it is also estimated that global shipping volumes have reached 1000 billion parcels. Much of this is utilizing lightweight packaging with helps reduce costs and emissions, while being easier to store.

However, wherever demand increases, paper handling operations must adapt. Businesses need to produce more, so paper rolls are getting bigger (and heavier), though the space they are stored in isn't. Busy operations and tight spaces can result in costly paper roll damage, which impacts productivity.

To improve efficiency, paper operations need to specify trucks with not only the right capacity, but also the correct specialist attachments. However, it is a consideration that the oil used to power attachments can get very hot, so forklifts require excellent cooling ability to help reduce leakage and the associated maintenance needs, and product damage.

Applications may find it helpful to consider smaller fleets, but with more specialist equipment. It is also important to specify trucks that have a compact enough footprint to manoeuvre in tight spaces, which are now more available due to advances in space saving truck design.

### // CHALLENGE 4. PRODUCTIVITY IN TOUGH ENVIRONMENTS

Though damage is less of a concern in recycling applications, the same pressure is there on how much operators can 'lift and shift'. And this is hard work for trucks and operators in harsh, dusty, and dirty environments, where loose recycle debris can become lodged under equipment.

Lift trucks that are not properly cleaned out and maintained in these types of applications can overheat in such conditions, which can prove troublesome for operations with productivity targets to meet. As well as downtime, this can also increase maintenance costs.

The good news is that by selecting the right materials handling equipment, the potential for this type of issue can be reduced. Some lift trucks are designed to handle challenging conditions and additional technologies are available to minimize radiator clogging from debris build up and prevent overheating issues.



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### // CHALLENGE 5. GOING DIGITAL

A once very traditional market, the paper industry is now an industry in full digital transformation, as both market and consumer needs have changed. And it is necessary to innovate to remain competitive. Not only is there a keen interest in harnessing the power of 'big data' but there is also a big push towards implementing eCommerce solutions.

Technology is being implemented at various stages of the paper production process, using connected devices during manufacturing, and digital tools to monitor and measure product quality. Automation is also a consideration.

From robotic lift truck solutions, through to digital fleet management resources that can be accessed anywhere, on any device, there are several ways that materials handling equipment can support the move into a more digital world.

### PREPARING FOR THE FUTURE

Many of these challenges will remain, but others may emerge. So how can paper handling applications be prepared with the right materials handling solutions in future?

In the circular economy of the paper industry, many businesses need to select a supplier that covers every segment within it, can support them on their ongoing sustainability journey, and that delivers equipment and technologies built with real-world applications and customers in mind.

With an extensive range of tough, up to date lift truck models to choose from, decades of expertise, and a network of experienced local dealers providing support, Hyster can help support the different needs of specific paper handling and recycling applications.

Visit [www.hyster.com](http://www.hyster.com) to learn more.



\*<https://www.sciencedirect.com/topics/earth-and-planetary-sciences/pulp-and-paper-industry>

\*\* <https://www.smithers.com/en-gb/services/market-reports/paper/the-future-of-specialty-papers-to-2024#:~:text=Papers%20to%202024-,The%20Future%20of%20Specialty%20Papers%20to%202024,28.02%20million%20tonnes%20in%202024>

\*\*\* <https://www.mckinsey.com/industries/paper-forest-products-and-packaging/our-insights/how-the-paper-and-forest-products-industry-thrives-in-the-digital-age>