The Magazine for the materials handling professional



WHAT NEXT? **Trends shaping materials handling in 2021**

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Waste not – ever

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Wood or plastic?

An even-handed guide to pallet choice

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After such a challenging time in 2020, our first issue of Eureka in 2021 offers some practical suggestions to help materials handling businesses recover and grow.

Gian Schiava sums up the key trends our industry should be adapting to - and turning to our advantage - in the year ahead. Increased use of data in driving operational improvements is a trend examined further by Mark Nicholson, who finds out how businesses can benefit from lift truck telematics technology.

As concern for the natural environment continues to grow, Ruari McCallion updates us on packaging-related issues and new sustainable solutions. The materials handling and logistics sector has an important part to play in reducing waste and building a circular economy, which makes great financial as well as moral sense.

Choosing the right pallet material can make a big difference to the smooth running and profitability of your operation. Wood is still dominant, although plastic is growing in popularity, but which is best? Well, it depends. Mark Nicholson investigates and presents an unbiased guide.

We hope you will find these articles informative and useful. If you have any questions or comments, we would love to hear them. Is there any other topic you would like us to research? Does your business have something on which we could report? You can email us at comment@eurekapub.eu or message us via our website www.eurekapub.eu



Monica Escutia Commissioning Editor







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WHAT'S NEXT AND HOW COULD IT AFFECT YOUR BUSINESS?

KEY TRENDS AND INFLUENCES FOR MATERIALS HANDLING IN 2021

To say 2020 was a challenging year would be a massive understatement. **Gian Schiava** offers some thoughts on trends that will shape the year ahead.

The economic downturn and Covid-related restrictions affected companies and employees alike. Nevertheless, we also learned that adverse situations often lead to new opportunities for businesses, large or small. For example, many restaurants professionalised their takeaway services to try and keep themselves afloat. Many large retailers – especially in the food and fashion sectors – adapted by focusing primarily on e-commerce. E-Commerce News reported an expected turnover of 717 billion euros in Europe at the end of 2020 – an increase of 12.7 per cent compared to the situation in 2019. This growth is lower, of course, than the 14.2 per cent increase seen in the previous year, but in the light of 2020's adverse conditions it's an encouraging figure.

In mature e-commerce markets, like the UK and the Netherlands, this meant that companies maintained or slightly improved their position. However, in countries like Spain and the eastern part of Europe the percentage of online shoppers showed impressive growth. Furthermore, it is anticipated that business-to-business e-commerce will also grow, due to prolonged social distancing and the expectation that working from home will somehow continue. If 2021 promises to be the year of cautious economic recovery and of e-commerce channel dominance, what does this mean for people working in the materials handling industry? Let's take a close look at the annual Logistics Trend Radar, a survey conducted by DHL amongst thousands of professionals. Whilst the report also addresses long-term trends and overall supply chain concerns, we will focus on the short-term gamechangers and their impacts on materials handling:

1. SOCIAL AND BUSINESS

In the near future, professionals expect to develop even more ways of reaching the customer. New **omnichannel** retail concepts include webrooming, in which consumers research products online before buying them in-store – as opposed to showrooming, where they browse products in-store before buying online elsewhere.

Another development is no-line commerce, in which boundaries between channels are 'eliminated' from the perception of the customer. This blurring of channels requires deliveries, fulfilment and returns to come together through technological integration and data sharing – not just within the company itself but more especially between partners and suppliers.

The other high-impact trend is one we wrote about in a previous Eureka, article¹. It is the **transformation of work** in the logistics industry, due to automation, an ageing population, and the rise of the millennial workforce. We can now perhaps expand on that with lessons from last year's crisis. Humans will need to cope with collaborative robots, flexible work systems, continuous learning and the need to gain new skills.



Companies will have to make sure they not only develop their employees but do everything possible to retain their workforce for the future. Amongst many examples of the way forward is that warehouses should pay extra attention to the ergonomics of new equipment to reduce stress and injuries. In forklift development – more than ever before – the human factor is regarded as the most influential in determining the productivity of machines.

Slightly less relevant – as it mainly concerns the fresh chain – is growth in the fulfilment and delivery of **temperaturecontrolled goods** through standard networks. We are now used to ordering groceries, meals and pharmaceuticals online, and are therefore creating new challenges for suppliers with regard to picking, packing and transporting shipments whilst controlling temperature. In view of this growth, the industry must further develop special processes and cold-chain packaging.



2. TECHNOLOGY

In this area, the two most influential factors are boosting the importance of data-driven logistics. First, there is the **Internet of Things**, which provides the opportunity to connect virtually anything to anything. Machines and objects can send, receive, process and store information, and even become self-steering entities. They provide new insights to logistics providers and enable them to manage activities better. Insights are also enhanced through **Big Data analytics**. The amounts of data gathered from various supply chain sources are huge and can be used to improve operations.

Robotics and automation are likely to see a real boom, and that is not just because of higher productivity or better fulfilment performance. As mentioned already, it is vital to retain employees. Improved health and safety, and reduction of repetitive or physically strenuous tasks, therefore become major factors in decisions on new equipment. As self-driving vehicles (like AGVs²) take over the less pleasant tasks, staff can be assigned to more complex and rewarding work.



When it comes to forklift and warehouse trucks, we expect that the adoption rate of Li-ion³ battery models will grow. Demands for higher output in order picking, in particular, can be met through lowering downtime with these fast-charging and zeromaintenance power sources.

Economic recovery in 2021 may still be fragile, and some companies will not survive the damages incurred in 2020. One thing we can be sure of is that the logistics and materials handling sectors will be amongst the first to benefit when markets start to rebound. Above all, what we can learn from last year is that wellorganised logistics are now vital to the survival of our businesses.



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- 1. https://eurekapub.eu/materials-handling/2017/11/01/ changing-face-working-warehouse
- 2. https://www.rocla-agv.com/
- 3. https://www.catlifttruck.com/cat-forklift-trucks-li-ion-batteries

HARNESS THE **POWER OF FLEET DATA TO LOWER YOUR** TOTAL COST OF OPERATION (TCO)

HOW TELEMATICS CAN BOOST YOUR MATERIALS HANDLING OPERATION

Would you like to manage your lift truck fleet in a way that saves money, raises productivity, improves health and safety, and lowers environmental impacts? That's the promise of telematics. With help from experts on the subject, Mark Nicholson explains how your business can benefit from this data-driven management approach.

Finnish Cat® lift truck distributor Logisnext Finland is a specialist in the development and application of telematics and other digitally based services. "A manager can't physically watch a forklift's activities 24 hours a day, or see what's happening under its skin," says Outi Kettunen, the company's Director of Business Development and Sustainability. "The larger the fleet, the more difficult it becomes to keep an eye on every truck. Our answer is to monitor everything remotely, using a telematics system. This technology gives managers all the information they need to run their fleets more efficiently and effectively."

It tells them, for instance, where each truck is; who is driving it; what it's doing (and what has been done to it!); how its components are performing, and what is their condition. These parameters can be observed in near real time, and the data collected builds up into a comprehensive history which is analysed to see where improvements are needed.

"When combined with information from other sources, like ERF (enterprise resource planning) systems and service records, that data becomes even more powerful," Outi adds.

If you're wondering whether your fleet is large enough to benefit fully from telematics, she has this advice: "Usually the benefits arise when there are at least 10 trucks, and preferably 30 or more. However, telematics also has uses in some smaller fleets; for example, where lift trucks are crucial in keeping production running and where downtime would be very expensive. It can be applied to all units, from the smallest power pallet truck to the biggest electric or IC engine counterbalance forklift."



HOW TELEMATICS WORKS

Telematics is one of today's expanding applications of the Internet of Things (IoT), which enables objects (in this case trucks and their components) to send and receive information. IoT devices fitted to the truck provide location, sensing and diagnostic connection functions, as well as storage and transmission of data. They send their information to a cloud-based server via wireless networks like WiFi, 3G, 4G, 5G and satellite. There it is processed, analysed, interpreted and displayed, via the internet, on users' desktop, laptop, tablet or phone screens.



WHAT TELEMATICS CAN MONITOR Depending on the system and contract specifications, you can monitor all this and more:

Driver identity

- Truck position
- **Truck activity** including active and inactive time; starts and stops; idling time during tasks; time spent on specific movements, e.g. travelling, lifting, lowering and tilting; daily and seasonal patterns of use
- Driving characteristics such as speed, harsh acceleration and braking, and fast cornering
- Shocks both large and small
- Engine and motor data including odometer readings, fuel or electricity consumption, temperatures and faults
- Battery data including temperature, electrolyte level, state of charge, and charging and discharging history; on Li-ion batteries, data can be drawn from the battery's own BMS (battery management system)
- Completion of pre-shift checks

"Importantly, all of this should be joined up with data on the fleet and its servicing, including contracts, serial numbers, truck details and accessories, as well as service history and costs," Outi Kettunen emphasises. "This is our starting point for making connections between problems and causes, and taking well-informed decisions."

TELEMATICS' KEY BENEFITS

Here are some of the improvements telematics will allow you to make:

- Lower total cost of operation (TCO). Enforce daily checks. Deal with faults quickly, before damage develops. Schedule repairs and preventative maintenance to minimise downtime. Identify causes of excessive wear or premature failure in components. Maintain truck condition to maximise performance, efficiency and service life.
- Fleet streamlining. Gain a clear overview of operations. Remove unnecessary trucks. Reassign and fully utilise under-used trucks. Change the mix of truck types if some are in roles better served by a different category.
- Easier administration. Make contract conditions, cost responsibilities, hours worked and other relevant details transparent to both supplier and user. Enable fair, trusting, positive collaboration and fruitful partnership. Be certain of truck and battery condition when the time comes to resell or reuse.
- Lower fuel and energy costs. Encourage efficient driving behaviour. Identify and remove traffic bottlenecks and other reasons for idling.
 Optimum battery use. Ensure charging at the right times and levels. Extend battery lifetime.
- Fewer accidents. Allow only authorised drivers to use trucks. Assess driving behaviour. Reward those with good habits and provide specific additional training for those who need it. Investigate accidents to identify and remedy causes, hazards and danger areas, and make drivers accountable if they are at fault.
- Improved employee safety and satisfaction. Reward good drivers. Improve working conditions. Identify any links between patterns of behaviour or truck use and illnesses such as repetitive strain injury.



Juha Pöllänen, Director of ICT and Parts Operations at Logisnext Finland, summarises the value of these gains. "Telematics boosts productivity by ensuring you have right truck in the right place at the right time; each one maintained to give high performance and uptime, and driven well by operators who have received targeted training and encouragement. Costs are reduced by streamlining fleet size, by cutting fuel and electricity bills, and by extending the life of batteries and other components so fewer replacements are needed. There is also less expense relating to damaged trucks, workplace structures and goods, as well as injury, illness and sickness absence.

"Better sustainability is an additional bonus. More efficient use of fuel and power means lower CO2 emissions, while reduced accident damage and longer component life helps conserve the earth's material resources and avoids the energy and emissions associated with frequent repair and replacement of broken or worn items."





Telematics ensures that every truck, of every type and size, is in the right place at the right time.

CONNECTING DATA

"To give an idea of how working with telematics and other data leads to improvements, here are just a couple of examples. In one case, frequent tyre replacement was previously costing more

than the customer's hire fee. Telematics indicated many upward shocks, from which we concluded that a poor workplace floor was wearing tyres rapidly and needed attention. Another customer cut collisions by 90% through identifying the drivers involved and rewarding good driving."

Outi Kettunen, Director of Business Development and Sustainability, Logisnext Finland

TELEMATICS AND THE FUTURE

"We expect telematics technology to continue growing in sophistication, versatility and affordability. Developments are likely to include more precise indoor location and tracking, more intuitive user interfaces and displays of information, and more extensive connection with other data sources. For instance, linking to human resources and training systems could allow automatic verification of an operator's suitability to drive a particular truck. Artificial intelligence and machine learning will bring further possibilities, such as autonomous decision-making and interaction with automated systems and cobots.

"We see telematics data as an essential 'fuel' for effective intralogistics, now and in the future. You could say data is like oil – and we would add that data is in some ways renewable and reusable for different value creation purposes. Its importance in decision-making at all levels is increasing rapidly, and the insights and understanding it makes possible are sure to add value for

organisations and societies. To fulfil that potential, there will be a need for more data engineers and data scientists. At Logisnext Finland we are already more than a decade into our own data journey, and we look forward to achieving even greater heights with our customers."

> Juha Pöllänen, Director, ICT and Parts Operations, Logisnext Finland

TELEMATICS FOR YOU

The telematics solution described is offered by Logisnext Finland to customers in that country. Outside Finland, you can contact your local Cat® lift truck dealer for advice on suitable systems and providers.

To find out more about what telematics involves and how it can be applied to your fleet, your lift truck supplier is a good initial source of information. Juha suggests you consider the following issues.

"Telematics is available as a service. You will pay a monthly fee for a complete package including the IoT devices, user interfaces, data processing and essential analytics. Check that your telematics agreement covers everything you need, that you are not paying for anything you won't use, and that all costs are transparent. Our optional extras, for example, include a battery management system. We are also developing additional analytics services.

"Make sure the user interfaces and information displayed are easy to use and interpret by staff at all levels in your company, and that actions can be taken as a result. To gain maximum benefit from the data generated, you will need to be able to call on the telematics provider's analytics expertise and guidance in major decision-making. Look for providers and equipment with a reputation for reliability and data security. Finally, ask for evidence that the systems will be scalable to match with your growing needs, adaptable to link with other current and future data sources, and futureproofed to benefit from continuing developments in technology and functionality."

Article feedback is welcome: editor@eurekapub.eu

WASTE NOT ... EVER

THE DRIVE FOR MORE **CIRCULAR LOGISTICS**

Plastic is often painted as the villain of pollution and wastage but all kinds of packaging material, including board, paper, shrink wrap and bubble wrap, are wasted and discarded, every day. **Ruari McCallion** investigates the issues, the latest sustainable solutions and the implications for materials handling and logistics.

Cardboard and paper are thought of as naturally biodegradable but: they leak. This industry has benefited enormously from the growth in plastic packaging, including one-way packages, shrink wrap, bubble wrap and other materials that are aseptic, leakproof, reliable and flexible - but the environmental cost has been huge and continues to be, despite many fine words and glossy reports.

A number of developments mean that producers are under legislative and market pressure to improve their game: logistics and material handling will inevitably be part of the drive for improvement.

MUST TRY HARDER

While recycling is a word on many lips, the reality can only be described as a disappointment. PET (polyethylene terephthalate) and HDPE (high-density polyethylene) both have extensive and welldeveloped kerbside collection infrastructures, across Europe. Even in the UK, which is a bit of a laggard, 92 per cent of local councils collect PET for recycling. However, only around 30 per cent of PET is recycled, despite being eminently suitable: it can be reprocessed seven times before thermal degradation undermines its crystalline structure.

Major users such as Coca-Cola are investing in systems to make packaging easier to recycle, and in improved systems of collection. Coca-Cola Amatil in Australia launched its Mercury Sylon sports cap three years ago; it is made entirely of one material - HDPE - which makes it easier to recycle. The cap's designer, Universal Closures Ltd, whose HQ is in England, has redesigned it into a two-piece unit, to make it even easier.

EU legislation to require all caps on plastic bottles to be tethered, in order to minimise losses and discarding, becomes law in 2024.

CHANGE WILL COME

These developments are welcome, to ecoconscious consumers and to the environment, but the development of genuinely circular logistics requires a far stronger collection infrastructure and, maybe, the abandonment of previously cherished technologies.

LDPE (low-density polyethylene) shrink wrap is convenient, easy to use - and all too easily discarded and allowed into the environment. One solution could be MarinaTex, a novel plastic developed by former Sussex University student Lucy Hughes, who won the international James Dyson Award for her invention. The plastic is based on fish skin and scales - in other words, waste; one Atlantic cod can produce enough for 1,400 MarinaTex carrier bags. It is compostable with normal garden rubbish, which makes it easier for consumers to deal with than other supposedly biodegradable products, which need specialist treatment.







1. Source: Rotajet Recycling. PET Recycling | Polyethylene Terephthalate | Recycling Solutions | Rotajet (plasticwashing.co.uk) 2. Source: Waste Management, Inc: "WM Report on Recycling", September 2020. WM_Report_on_Recycling.pdf

BACK TO THE FUTURE?

A number of manufacturers are putting forward a return to cardboard, paper and paperboard as appropriate in environmentally sensitive times. While superficially appealing, there are a few hurdles and challenges.

Cardboard and paper are thought of as naturally biodegradable but; they leak. To make them capable of handling liquids they need to be built into a composite structure, which will include a waterproof layer, usually a polymer; if the proportion is more than five per cent then the material will not be considered recyclable, under Ellen MacArthur Foundation definitions.

American-owned Sonoco, which has more than 100 paper mills across the world, is working with Kellogg's in the UK to develop solutions to deal with composite packaging, such as Pringle's cans. Laura Rowell, Director of Global Sustainability at Sonoco until the end of 2020, said that systems are emerging to recover all components, not just fibre to be turned into paper.

Sonoco is developing systems that have already demonstrated the feasibility of pulping baled cans and used beverage cartons, extracting almost 100% of the fibre for reuse and removing residuals, including metals, for separate disposal. Sorting specialist Tomra, which uses near-infra-red optical sorting technology, has identified a spectrum that works. Grocery chain Tesco is also involved with the project.

However, the material has to be collected, first.

OPPORTUNITIES AND CHALLENGES

The infrastructure is developing; and there is room for more active involvement by the logistics and materials handling industry. As observed earlier, it won't necessarily be simple. Changing from the familiar plastic packaging - which is robust and has, typically, been something that logistics companies use as an easy-to-handle delivery medium - to softer materials, and maybe more complex and fragile packaging, could be expensive and timeconsuming. It could require investment in capital machinery to achieve it.

The industry could resist the inconvenience or it could embrace the opportunity. The Ellen MacArthur Foundation reckons that converting just 20 per cent of plastic packaging into reuse models is a US\$10 billion (around €8.2 billion) business opportunity. Whether it is simply a matter of introducing a collection and baling operation, paying someone else to do it or developing new activities to open new revenue streams, the reality is that logistics and materials handling professionals must pay attention to the challenges of reducing waste in the first place and then building the circular economy.

Article feedback is welcome: editor@eurekapub.eu



AN IMPARTIAL PALLET BUYERS' GUIDE

Pick up any materials handling or logistics magazine today and you're likely to see articles and advertisements comparing the pros and cons of plastic and wooden pallets. For the most unbiased view possible, Eureka's Mark Nicholson has been speaking to a company that manufactures, sells and equally promotes both kinds.

"Our profit margins on plastic and wood are fairly similar, so we have no vested interest in steering buyers one way or the other." says Chris Shawyer, General Manager at Southampton-based Associated Pallets. "The best pallet for each of them depends on their exact application. Most people already know what type they want. If they're not sure, our advisers will ask detailed questions about how the pallets are to be used and will then make a recommendation."

He continues: "We tend to get more requests for wooden pallets, mainly because they are much cheaper than plastic, but price shouldn't be the only consideration. Both materials have advantages and disadvantages which have to be weighed up. In some cases, the right choice is obvious; in others, customers must decide which factors are most important to them."

With advice from Associated Pallets, we have put together the following comparison of plastic and wooden pallet properties. We then present a simple checklist aimed at matching these to the needs of common applications.



PALLET PROPERTIES **CLEANLINESS AND HYGIENE**

For situations where pallets need to be thoroughly washed, plastic has the advantage thanks to its non-porous material - which also shrugs off spillages and odours. Wood can be cleaned, with care, but its absorbency is an issue. It can be structurally weakened by water and contaminated by absorption of spilled liquids. Nevertheless, wood is still suitable for most hygienic industries, like food, but plastic takes over where extreme cleanliness is needed. It also looks neat and clean.

REGULATORY COMPLIANCE

There is a long list of countries, including the EU as a block, which require all wooden pallets and wooden packaging entering them to meet 'ISPM 15' regulations. This is to prevent the spread of diseases and pests. To comply, they must be heat-treated and officially stamped. Plastic pallets are exempt from these requirements, as their material cannot be infested by microbes, moulds and insects.

DURABILITY

Under normal circumstances, plastic pallets will have a much longer lifespan than wooden. Their material is hardwearing and resistant to accidental damage. Heavy knocks may weaken and distort a wooden pallet's structure, while plastic pallets are more likely to absorb shocks and bounce back into shape. However, when damage occurs, wooden pallets are much easier to repair, while damaged plastic pallets may have to be scrapped.

Impacts on wooden pallets may result in loose nails, splinters and sharp pieces of broken wood which can damage or contaminate goods and injure people. On a smaller scale, rubbing, scratching and banging of wooden surfaces during everyday handling can be enough to release dust and small wood fragments. These may be a problem in sensitive workspaces.

Wooden pallets stored outdoors may be damaged by wet or damp conditions, which don't affect plastic. In most climates, plastic is more weatherproof - but note that extreme heat may deform it and extreme cold may make it brittle.



WEIGHT AND STRENGTH

Whatever their material, pallets must be specified for the maximum load they will carry. They come in a variety of designs, including versions for very heavy loads in both materials. Plastic pallets give added stability, as their strength is more evenly spread across their whole structure.

At comparable capacities, plastic pallets are significantly lighter than wooden. This reduces fuel-related transport costs. Space-saving, nestable plastic pallet design options can save further on fuel, as they reduce the number of vehicle journeys needed for delivery and retrieval of empty pallets.

Comparing purchase prices is easy, but your final choice will depend on what application the pallet is being used for.



UNIFORMITY

Plastic pallets are more precisely consistent in their dimensions and weight, and their shape is less likely to change over time. This may be important where accurate load calculations are essential, or where pallets are used in automated handling systems with low tolerance for variation. However, wooden pallets can meet these needs if they are properly constructed, maintained and handled.

When empty pallets are piled high to optimise use of storage space. consistently sized and shaped plastic units may create more stable stacks. To minimise the risk of slippage, they can be designed with grooved, nonslip surfaces. Wooden pallets offer natural friction due to their rougher material. Nesting plastic pallets are the most efficient of all for storage.

CUSTOMISATION

Wooden pallets are relatively easy to custom-design to the user's specifications on capacity, size, handling methods and other factors. Customised plastic pallets are less commonly available and can be very expensive.

SUSTAINABILITY

Sustainability arguments around plastic and wooden pallets become quite complex, but most people agree that wood is the greener choice. For a start, plastic comes from a non-renewable resource. Wood is not only renewable but has a negative carbon footprint, as trees lock away CO2. Timber from sustainably managed forests is particularly good, environmentally, and in any case pallet manufacture tends to use leftover wood which would otherwise be wasted.

Wood and plastic can be recycled in different ways. Plastic may be melted down, processed into pellets and used in the manufacture of other products. Even if those new items are themselves recyclable, there will



ultimately be a time when the plastic is disposed of as non-biodegradable waste. By contrast, wood will eventually biodegrade and return its nutrients to the earth's natural cycles. In the meantime, it may be reused in other wooden constructions or broken down into useful materials like mulch and sawdust.

Plastic pallet manufacturing and recycling tends to be more energyintensive and carbon-producing. On the other hand, plastic's longer life means fewer replacement pallets need to be manufactured over the long term. Meanwhile, its weight reduction advantages can lower transport-related pollution.



COST

Although the purchase price is considerably higher for plastic pallets, it may be outweighed by their ongoing economic advantages – depending on your application. Consider, for instance, their longer life, lower transport costs, easier cleaning and ISPM 15 exemption.

Price shouldn't be the only consideration.

SOME KEY QUESTIONS

What is your market? Some sectors typically use one material or the other, so sticking to the norm can avoid complication.

What is your load size and weight? For most purposes, you should find suitable pallets in both materials.

Will your pallets be returned? If you're not going to see them again, choose wooden pallets – ideally secondhand.

How clean do they need to be? Products are almost always safely packaged, so they don't come into direct contact with the pallet. However, some food and pharmaceutical environments are so sensitive that only plastic is acceptable.

How far are they travelling? For air freight, in particular, plastic's lighter weight reduces cost. Plastic pallets' uniformity is also helpful. In long-distance, high-volume road haulage, they lower fuel costs through lightness and efficient use of space.

Are you exporting? Wooden pallets travelling to some countries need to be heat-treated and certified to ISPM 15 standards. There is no such requirement for movements between EU nations (except for exports from Portugal). As of 1st January 2021, all wooden pallets moved from Britain to the EU must comply with ISPM 15. Using plastic pallets avoids this complication.

Will they be handled automatically? Before buying pallets for use with automated transport, handling or storage systems, ask the equipment's supplier about pallet specifications. If wooden pallets are to be used and reused within the system, you or your pallet supplier must ensure they are well maintained and of good quality. Alternatively, use plastic.

Do you need a bespoke size or design? In most cases wooden pallets will be the best choice.

Will the pallets be on display? Plastic may give a better impression, although new wooden pallets also look good.

How important is sustainability to your customers? You can make a good green argument for either material, but it's probably easier with wood.

Chris Shawyer concludes: "If you find that plastic and wood can equally meet your operational needs, the next thing to think about is their relative cost. Comparing purchase prices is easy, but your final choice will depend on what application the pallet is being used for. Consider, for example, the value of the goods being loaded onto it, and whether the pallet is going to be reused.



"If you're shipping out low-cost

goods, and if you will never see the pallet again, then wooden pallets may be your best option. But if your application is for food, and if the pallet needs to be kept clean or to be reused time and time again, then plastic pallets may be best. ISPM 15 regulations may also be a factor: wooden pallets must be heat-treated, but plastic pallets are exempt. Lightweight nestable plastic pallets have become a popular choice in that situation."

In summary, there's no easy answer to the question of whether plastic or wood is best. Every business has different circumstances and should come to its own conclusion based on the facts. We hope you will find Eureka and Associated Pallets' even-handed guidance useful.

For further information, visit Associated Pallets' general website at www.associated-pallets.co.uk and its plastic pallets site at www.plasticpalletsuk.co.uk.

Article feedback is welcome: editor@eurekapub.eu





EVENTS E

SUPPLY CHAIN EUROPE VIRTUAL 2021

19-20 May 2021 Online/Virtual

Supply Chain Europe Virtual 2021 has one simple aim: to equip the supply chain sector with the most crucial information that you can weave into your strategy and develop an improved, customer-centric business model that can deliver both now and in the future, centred around the efficiency, accuracy and flexibility of your supply chain operations.

reutersevents.com/events/eu3pl

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01-02 July 2021 The Ricoh Arena, Coventry, UK

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SITL -TRANSPORT & LOGISTICS INNOVATION WEEK

13-15 September 2021 Porte de Versailles – Pavilion 1, Paris, France

The professional event for innovation in the transport, logistics and supply chain industry.

www.sitl.eu/en-gb.html

IMHX

14-16 September 2021 NEC, Birmingham, UK

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