

The transit packaging report

Contents

- | | | | |
|----|---|----|---|
| 01 | Foreword
Bernard Sellars
Lindum | 07 | Why data sharing is key to product safety in transit
LI Europe |
| 02 | Introduction
Amar Ramudhin, director of the Logistics Institute, University of Hull | 08 | Corporate manslaughter: a director's responsibility
Roythornes Solicitors |
| 03 | Trends in transit packaging and logistics
Cold Chain Federation | 09 | The true cost of an accident
Marsh Commercial |
| 04 | Plastic reduction and the Plastics Tax
Recoup | 10 | The EUMOS regulations, what are they and how do they work
Newton Research Institute |
| 05 | Key principles of packaging reduction
The PackHub, packaging consultants | 11 | Reducing your transit packaging costs
Lindum |
| 06 | Automation in transit packaging
Granta Automation | | |

Foreword

Transit packaging is the Cinderella of the supply chain. Pallets, cardboard cartons, tape and pallet stretch wrap are vitally important in getting billions of products from producers to customers safely.

As specialists in the field, we believe innovative transit packaging products can significantly reduce plastic usage and drive business profitability.

But things are changing. The introduction of the Plastics Tax, a growing focus on sustainability and increased concern from consumers about plastic use, mean all parts of the packaging and logistics industry are under increasing scrutiny.

So, we have produced this report to highlight the challenges and issues surrounding transit packaging and to highlight how some of them can be addressed.

We've brought together some of the leading experts from across the industry, as well as specialists in the legal and insurance issues that affect our sector. I would like to thank them all for their contributions.

I hope you find this report useful as well as thought provoking. I'd welcome your thoughts and comments, so please get in touch if you'd like to discuss any of the issues raised.



Bernard Sellars
Managing director - Lindum Packaging

Welcome

Amar
Ramudhin

Director of Logistics at
Humber Development
Institute and lecturer
Logistics and Supply
Chain Management
University of Hull.



UNIVERSITY
OF HULL | LOGISTICS
INSTITUTE

No material has been more influential than modern plastic. Thanks to its versatility, durability and ability to be moulded into any shape, it is used in almost every single industry, and logistics as we know it would not exist without it.

Plastic has revolutionised our supply chain. Pallet stretch wrap is to pallets what containers are to deep sea shipping. Stretch wrapped pallets offer a convenient and economical way to ship goods. It makes less-than-truckload (LTL) and less-than-cargo load (LCL) shipments possible for smaller shippers which can be consolidated in FTL or FCL for a time and cost efficient solution. It enables more products to be sent in fewer journeys. As such it has become a staple packaging material in the logistics industry.

But there's no doubt our reliance on plastic and our view of it as disposable has led to environmental challenges. More than 5 trillion pieces of plastic are already floating in our oceans, 73% of worldwide beach litter is plastic, and more than 40% of plastic is used just once before being thrown away.

Today, the largest market for plastics is packaging materials, so the burden of responsibility to solve this problem weighs heavily on brands and manufacturers. UK businesses have pledged to the Plastics Pact which strives to achieve the following by 2025:

- Eliminate problematic or unnecessary single-use packaging;
- 100% of plastics packaging to be reusable, recyclable or compostable;
- 70% of plastics packaging effectively recycled or composted;
- 30% average recycled content across all plastic packaging.

Additionally, in an effort to encourage businesses to use more recycled plastic in their packaging, the long-anticipated plastic tax comes into force next year. But the transit packaging and logistics sector, the essential yet often invisible middleman between manufacturer and the consumer, faces a dilemma.

On the one hand transit packaging is clean and hence 100% recyclable.

But the tax could have unintended consequences. The required 30% recycled content needed to avoid the tax could make pallet stretch wrap weaker, meaning more will be needed, and creating even more waste.

This report explores some of the ways businesses can maximise the efficiency of their pallet wrapping processes whilst reducing plastic waste.

It also considers some of the responsibilities and challenges that can result from problems in this crucial part of the supply chain. This information is vital to any business handling and transporting palletised products as we head into a future where demand for packaging materials will continue to grow and use of automation will increase.

Increasingly when pallets of product arrive at distribution centres, they are not unloaded by people, but machines. Pallet stacks will need to be of a consistent size and shape to be unloaded and unwrapped. This will require companies to adopt best practice for pallet stretch wrap to avoid pallet deformation in transport.

At the same time, the use of biodegradable materials will become more common. But without the necessary infrastructure to separate and recycle these polymers, they will present a contamination risk to traditional pallet stretch wrap recycling.

As a clean plastic that provides an easy-to-separate plastics stream, used pallet stretch wrap is a valuable and sought product for recycling.

If logistics businesses can minimise waste plastic and ensure that the plastic used is successfully recycled, the sector can make a significant contribution to environmental targets, as well as reap the benefits of more efficient processes.

<https://lido.hull.ac.uk>



03

Tom Southall

Trends in transit packaging and logistics:

Tom Southall, policy director, Cold Chain Federation.



Anyone who has stepped inside a distribution warehouse will be left in no doubt of the ubiquity of plastics in our supply chain, both for individual products and for the transit of bulk product, most commonly as plastic shrink-wrapped pallets.

The cold chain is no different. There is good reason for this, plastic wrapping is highly effective for keeping products secure, ensuring pallets conform to the necessary physical dimensions for warehouse management and distribution and also in helping to keep products safe at chilled and frozen temperatures.

As society becomes more aware of the need to protect our environment, including cutting down on single-use plastics, many manufacturers have come under pressure from consumers to switch to recyclable alternatives for their products. However, the adoption of alternatives to single use plastic stretch wrapping is not yet as high on the agenda in product distribution.

Globally, cold chain is growing, particularly in developing countries where it is viewed as critical to supplying safe products to growing populations. In the UK, we are also experiencing a growth in cold chain after years of under investment. A recent report by property experts Savills in collaboration with the Cold Chain Federation, identified the current capacity of temperature-controlled warehousing at 49m sq ft, with an additional 16.7m sq ft currently under construction. The growing cold chain will need to adopt more effective and environmentally friendly methods of packaging if it is to meet UK and global goals for decarbonisation and plastic reduction.

In some ways, plastic wrapping in transit is a microcosm of the wider paradox of sustainability in the cold chain. On one hand the industry is at the forefront of the global effort to reduce food waste, through keeping perishable products safe until they reach the consumer, but refrigeration is also energy intensive and threatens global decarbonisation efforts.

Cold chain businesses across the world are investing in ways to reduce their energy use and related emissions, but we must also consider ways to reduce the reliance on single use plastic wrapping without compromising the safety of the product and risking increased wastage – no mean feat.

Logistics companies sit at the centre of a typical supply chain. In the UK, third party logistics providers (3PLs) carry out the majority of transiting services between food importers/manufacturers and consumers (via retailers/food service). In essence, the 3PL transports products under strict requirements from their customers. Different products have varying vulnerabilities when it comes to maintaining safety during transit, for example chilled liquid dairy products are more vulnerable to damage and spillage than frozen bread. Decisions on the optimum method of transporting a specific product are stipulated by food businesses and there is little room for error. Superficial damage to a single product can result in the whole pallet being ejected, which can lead to a tendency of 'overwrapping' individual pallets.

Reducing or eliminating the use of single use plastic wrapping in cold chain transits will not be straightforward. Businesses across supply chains must come together to cooperatively identify ways to reduce its use or find alternatives. A combination of measures could include reducing overwrapping, applying better pallet configurations, minimising the need to split and re-wrap pallets, and trialling alternatives such as paper-based wrapping, reusable straps and adhesive solutions

The efficiency and safety of the UK cold chain is recognised worldwide and industry initiatives such as the Cold Chain Federation's 'Net Zero cold chain' project demonstrate its commitment to supporting the UK's aim to have a net zero economy by 2050. In the coming years, our industry along with others will come under increasing societal pressure to also reduce the use of plastic packaging in cold chain transits. Logistics is all about problem solving and now is the time for businesses across supply chains to come together and meet the challenge.

www.coldchainfederation.org.uk



04

RECUP

Stuart Foster

Plastic reduction and the Plastics Tax:

Stuart Foster, CEO Recoup.



Stuart Foster is the CEO of Recoup, a Plastics Recycling member-based charity which provides expert technical support, training and consultancy services for the development of efficient plastics recycling schemes. Here he outlines how businesses using pallet wrap can prepare for the upcoming Plastics Tax.

The Plastics Tax which was first announced in 2018 is now less than a year away. Essentially the tax, which will come into force in April 2022, will apply to plastic with less than 30% recycled content. Government plans to tax UK businesses £200 per tonne of plastic that does not contain the minimum recycled material.

The measure is expected to affect around 20,000 producers and importers of plastic packaging.

The tax is a catalyst for real change, which is why many businesses are looking to move beyond the required 30% recycled content.

It provides a clear economic incentive for businesses to use recycled material in the production of plastic packaging, which will create greater demand for this material and in turn stimulate increased levels of recycling and collection of plastic waste, diverting it away from landfill or incineration.

As a transit packaging material, unseen by the consumer, the environmental impact of pallet wrap isn't often talked about. But when you consider that the UK market for stretch film in pallet stabilisation is estimated at 140,000 tonnes annually, and that much, if not all, of the tonnage of stretch film used will ultimately contribute to waste streams throughout the supply chain, the potential impact of the tax becomes clear.

At Recoup we welcome the levy, which complements our wider strategy to invest in UK plastic recycling facilities and create a more circular economy, but also appreciate that calculating recycled content will be difficult and complex, so some businesses will inevitably just take the hit.

Nevertheless, there are steps your business can take to offset the potential cost of this tax.

One is to switch to a lighter-weight alternative. Opting for a lower micron film will help you reduce the weight of plastic you use, offsetting the proposed tax.

Advances in technology and manufacturing have produced lighter stretch films that retain and even increase strength. Light-weighting can also be achieved by switching to pre-stretched films, which also have greater strength.

It's also worth remembering that, while price per roll is often seen as the key factor in film purchasing decisions, it's not always cost effective in the long-term. There are a wide variety of film specifications, core weights and film lengths on the market, and once the correct thickness of film for a particular application has been determined, film can be purchased on a cost per metre basis.

20,000 Producers and importers of plastic packaging affected

Businesses now have less than a year to prepare for the Plastics Tax which is due to be implemented in April 2022. They should assess their use of plastic film now in order to future-proof wrapping operations.

Finally, I would like to say that, whilst plastics are often used as a totem of the environmental issue, they are also lightweight, help prevent food waste and where the right infrastructure exists, straightforward to recycle. So, organisations that use packaging and logistics need to look at their overall environmental performance, not just the amount of plastic they use in order to help the UK meet its overall climate targets.

www.recoup.org

05

Paul Jenkins

Key principles of packaging reduction:

Paul Jenkins, managing director ThePackHub.



**the pack hub**
INNOVATION ZONE

Paul Jenkins, managing director, of packaging innovation consultancy ThePackHub explores the plastic reduction agenda and recent developments in food and transit packaging.

It is fair to say that the transit packaging industry is experiencing significant change. The last few years have focused on the introduction of more sustainable solutions and the implementation of packaging reduction initiatives.

The need for change was brought to the world's attention by David Attenborough's ground-breaking Blue Planet 2 programme. The short broadcast highlighted the effect of plastics entering our oceans, and its impact on all parts of the packaging supply chain was far-reaching. It precipitated the introduction of various Plastic Pacts, now in existence across multiple countries, that aim to reduce plastic's impact by ensuring 100% recyclable, reusable or compostable packaging by 2025.

The clock is ticking with many brands, retailers and packaging suppliers moving forward with various packaging reduction strategies. The introduction of packaging taxes is also on the horizon.

The UK's, which is due for implementation in April 2022, will see a levy on plastic packaging with less than 30% recycled content. This activity inevitably influences demand for packaging reduction activities.

The growth of e-commerce is also significant. The sector received a shot in the arm during the COVID-19 pandemic as swathes of consumers around the world were compelled to switch from their local bricks and mortar store to buying directly from their mobile, computer or tablet screens. Some were trying online shopping for the first time, and most won't go back to the same physical shopping frequency again. Things have changed forever.

So what do these market forces and the drive for packaging reduction mean for the transit packaging industry? It means change. And lots of it.

There have been some recent market introductions that bring to life these changes.

Kraft Heinz announced it will be removing the shrink-wrapping for its multipack canned range for the UK market. The material will be swapped for sustainably-certified paperboard in a move in line with its company goal -

to make its packaging recyclable, reusable or compostable by 2025.

The change is reported to reduce the plastics footprint by 550 tonnes. The new sleeve is fully recyclable and uses 50% less material than a fully enclosed container as well as 10% less than traditional paperboard sleeves. A range of Heinz Soups will be the first off the production line with the new secondary packaging. Kraft Heinz is making a £25m investment over three years to make the infrastructural changes to ensure a smooth roll-out. Heinz says the new sleeves deliver an 18.7% carbon footprint reduction compared to the shrink-wrap equivalents they replace. This drive for material and carbon reduction is also affecting stretch film.

A new stretch wrap has been introduced that relies less on petroleum-based materials. The flexible film solution is made from 51% plant-based materials and has been launched by Canada's Good Natured Products. The Vancouver-based business has a growing assortment of more than 385 products and services and has expanded its product range to include the new plant-based flexible film pallet stretch wrap.

Unlike the industry norm, the new stretch wrap is derived from rapidly renewable sugarcane and is chemically equivalent to conventional #4 LDPE recycling system.

St. Paul, Minnesota-based Cortec Corp has developed the first compostable machine-grade stretch film in the world. Its Eco Wrap solution makes the commercialisation of compostable packaging for stretch film a reality. The material is made with a certified compostable resin combined with a tackifier additive. It can be used on most standard automated stretch-wrap equipment with multiple applications across the industrial packaging and warehousing industries. Most stretch-wrap uses require three wraps of standard film. Just two wraps of Eco Wrap is needed without any functional sacrifice in terms of strength or product protection.

There's no doubt that packaging reduction will continue to be a focus for the transit industry for many years to come. Successful businesses will be those that acknowledge this fact and seize the opportunity and benefits before their competitors.

www.thepackhub.com

06

Granta
ACHIEVE WITH AUTOMATION

Andrea marsh

**Automation in
transit packaging:**

**Andrea Marsh,
marketing manager
Granta Automation Ltd.**

An automated palletising system typically improves throughput to at least

140%

As a business you are no doubt familiar with the issues that arise from goods being damaged in transit; unhappy customers, returns and refunds, admin work in sorting out the issues, etc. All of these are no doubt areas you wish to spend less time in!

If you are experiencing these sort of issues, one of the key areas to investigate is your pallet stacking and wrapping process. If goods are stacked and wrapped securely, it makes for better pallet stability and minimises the risk of transit damage.

In this article we are going to look briefly at the role of automation in transit packaging.

Automated Palletising

Manual palletising can often result in inconsistent and unstable pallet stacks, which in turn can lead to goods being damaged in transit. It carries a high risk of repetitive strain injuries occurring, and the subsequent implications of staff having to be off work for long periods of time plus the cost of any resulting claims can quickly add up. Manual palletising can also limit throughput capacity and become a bottleneck in your production process.

Automated palletising results in neater, more consistently stacked pallets, with better pallet stability. This is due to the accuracy of the palletising system in consistently placing product in the right place on the pallet. An automated system will not stop for breaks and therefore increases your throughput, and improves production efficiency, typically increasing throughput to at least 140%.

There are many automated palletising systems available, so it is important to ensure that the system you choose will not only provide the immediate benefit of better pallet stacks, but will also service your future requirements. It is important to ensure the system has an integrated stack builder that creates the optimum stack pattern for your product. Choosing a system with easy programming software will also allow you to quickly and easily re-program the system to palletise different box sizes.

Automated Pallet Wrapping

Wrapping pallets by hand can result in pallets that are not wrapped tightly or securely enough. This in turn can lead to shift during transit and result in transit damage.

Automating this process ensures pallets are securely and consistently wrapped which reduces the risk of shift during transit and therefore minimises transit damage. It also reduces wastage, resulting in lower costs. Automated pallet wrapping can either be installed as a standalone cell, or integrated into the palletising process.

There are many automated pallet wrapping solutions available, so it is important to ensure the solution you choose meets your requirements. Chosen wisely, you will be able to reduce your pallet wrap costs, reduce downtime due to pallet wrap changes, and reduce waste by using less wrap per pallet.

Automation ROI

Payback on installing an automated palletising system can be less than one year. As a rule of thumb, if you have one person at the end of a line palletising product for one shift per day, payback is approximately three years. However, if you are running three shifts, the payback time then becomes less than a year. If you then include the intangible benefits, such as reduced risk of RSI and fewer transit damage claims, the payback time becomes quicker still.

Granta has an automation payback calculator and intangible benefits calculator that you can download to help you accurately forecast the ROI of investing in automation. <https://www.granta-automation.co.uk/resources>

Other Automation

Another example where automation plays a part in reducing transit damage is the automation of container unloading and palletising. If containers are unloaded and palletised consistently and securely, this results in better pallet stability for storage and onward transport. Additionally, it improves efficiency as it reduces manual labour requirements and improves throughput. Granta has recently installed one of these systems for a leading supermarket brand and as a result it is saving a minimum of 119 man hours per week.

Summary

Automation of pallet stacking and wrapping processes play a key part in increasing pallet stability and reducing the risk of transit damage. The payback on installing an automated system is often less than one year.

**helpline@granta-automation.co.uk
01223 499488**

07

Jeremy Praud

Why data sharing is key to product safety in transit:

Jeremy Praud
managing director
LI Europe.



LI Europe supports FMCG manufacturers in improving costs, quality and delivery. Managing director Jeremy Praud explains how a lack of visibility and data sharing within the supply chain results in damaged pallets, wasted time and avoidable costs.

Anyone with experience unloading goods from the back of lorries is likely to have encountered the term 'curbed' to describe damaged goods. The implication is the driver hit a curb en-route and as a result the pallets shifted, damaging the contents.

While this is unlikely to be the actual cause, what happens in the darkness of the lorry as it heads down the motorway is a mystery; pallets that appeared perfectly stacked and wrapped when they were loaded can emerge at their destination in an entirely different state.

When this happens, the best-case scenario is the time-consuming task of re-stacking. The worst-case scenario is products are returned, incurring financial costs and creating waste.



While incidents of excessively damaged pallets are relatively low, the impact of each incident is high, with damages and returns costing manufacturers, logistics operators and e-commerce retailers millions each year.

For businesses running a classic scheduling approach, the issue can take a particularly heavy toll in increased changeovers. Even for those enlightened factories running a fixed repeating schedule, where the optimum sequence is always maintained, the impact comes in the form of increased safety stock. This is because the repeating time frame is determined by forecast volatility, upon which damaged goods have a direct adverse impact. It's not obvious that transit damage would impact stock holding requirement, but it demonstrates the kind of hidden cost transit damage can have.

While the results of poorly wrapped pallets are observed when unloaded at distribution centres, the root cause can be traced to the end of the production line, where pallets are prepared and loaded. Unfortunately, it's difficult for factories to detect faults in stacked pallets, so it's something of an invisible problem.

Moreover, staff knowledge is very localised, so those who carry out the task never see the pallets unloaded.

A few years back we saw a situation where the end-of-line wrapper broke down. The factory team were proud they had been able to manually keep the production line running until the end of the shift, and their OEE numbers showed it. The fact the entire run had transit damage, and was returned, and that analysis showed it would have been significantly cheaper to not the run the line at all, was showed nowhere in any factory metrics.

This barrier between functions is where things fall down. Those who cause the problems rarely see the metrics measuring the quality of goods on arrival, so cannot adjust their processes accordingly. The fact this knowledge isn't readily available would have been understandable even 10 years ago, but in an age where data sharing is so simple, the information should be accessible.

Without data sharing, all parties blame each other for damage incurred. Manufacturers can face huge penalties from retailers and have pallets returned. Nevertheless, it's still deemed easier to make a claim for any damage than get to the root cause of it.

What's needed is more managerial and inter-functional co-operation, particularly at shop floor level. As things stand, as long as pallets are wrapped well enough to be safely loaded onto the lorry, this is deemed adequate.

Damage can only be avoided by optimising packaging and pallet-wrapping to keep pallets safe in transit and storage, but training in this area is notoriously hit and miss and there are many variables where things can go wrong.

Not enough tension in the wrap and the pallets are unstable. Too much wrap tension can crush boxes. If the wrap is not sufficiently attached to the base of the pallet, the whole stack could shift in transit. All these things have a devastating effect downstream.

For every irreversibly damaged pallet, there are 100 more that require some level of additional, unnecessary work because the stacks have shifted in transit. This is considered a low-level problem, invisible in many ways, but it's one with long term ramifications in terms of wasted money, product and time, as well as potential reputational damage.

www.li-europe.com

08



Phil
Cookson

Corporate
manslaughter;
a directors
responsibility.

Phil Cookson, partner
Roythornes Solicitors.

Roythornes Solicitors has been providing businesses and individuals with legal expertise for more than 85 years. Phil Cookson, partner and head of litigation team, explains the importance of having safe systems at work and risk assessments in place, and why keeping accurate H&S records could prove invaluable.

Almost 700,000 people in Great Britain sustained an injury at work in the last year according to the Labour Force Survey. Whilst the number of people killed at work was the lowest recorded, tragically 111 people were killed as they went about their daily jobs.

Although there's no record of these injuries being caused as a direct result of collapsing loads, injuries related to warehousing and transportation are all too common.

As well as costing billions of pounds in lost hours and disruption, company directors need to be aware of their responsibilities and the possibility of corporate manslaughter fines of between £180,000 to £20 million, when things go badly wrong.

Since the introduction of the Corporate Manslaughter and Corporate Homicide Act in 2007 there have been fewer than 30 convictions for 'Corporate Manslaughter'.



Most cases prosecuted by the Health and Safety Executive (HSE) in respect of fatal accidents at work remain cases based around the Health & Safety at Work Act 1974.

In terms of directors' personal liabilities, it is also worth noting that corporate manslaughter deals only with corporate defendants; only companies, limited liability partnerships (LLPs), partnerships and some public bodies can be prosecuted for the offence.

The normal route for prosecutions of directors in respect of their personal culpability is via s.37 HSWA, which requires the health and safety offence to have been committed by a company with "the consent or connivance of or has been attributable to any neglect on the part of" the director, or similar office holder.

In deciding whether or not to prosecute a director, the HSE asks a series of questions:

- Did the director/senior manager have effective control over the matter?
- Did they have (or ought they to have had) knowledge of the circumstances surrounding the event?
- did s/he fail to take obvious steps to prevent the event?

- Have they had previous advice/warnings?
- was there previous advice to the company?

To minimise the risk of personal liability, directors need to not only ensure relevant safe systems of work and risk assessments are in place, but that they are being followed. The fact there is a policy in place is not likely to amount to a defence if it can be shown the system on the ground was not being followed.

Directors need not just to appoint someone to be 'in charge' of H&S, but also to manage that person. There should be a regular system of reports on H&S issues and reports need to be actioned and developed. All directors should regularly ask questions as to how the decisions they make can influence H&S matters.

For example, an increase in orders may see a higher volume of raw material on site; how will that be stored safely? The HR director needs to ensure the overtime worked to process the increased orders does not make employees more vulnerable to accidents. The finance director needs to build into their numbers the steps which will be required at an operational level to manage the additional H&S demands.

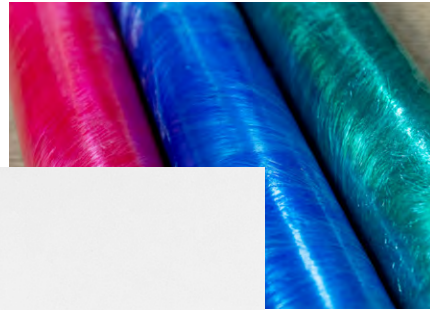
Not only is it important that these issues are discussed, but also that the discussions are documented. The ability for a director to point to a set of minutes whereby the issues are raised, a plan put in place to deal with H&S risks, then followed up and seen to be managed effectively, is very important.

Such evidence is vital to minimise the risk of a personal prosecution for a director. Sentencing guidelines for offences of this nature are based on a combination of the harm category and the culpability of the individual in question. In the case of fatal accidents resulting from obvious risks the level of culpability is the key. For cases of 'very high' culpability the likely sentence is 1-2 years' custody.

In cases where there is documentation showing the thought gone into decisions and how the risks have been managed, not only will it offer the prospects of a defence, but also the ability to minimise any sentence.

www.roythorne.co.uk

09



Jonathan McArdle

The true cost of an accident:

Jonathan McArdle, insurance broker & risk management consultant Marsh Commercial.



Marsh Commercial is a UK community insurance broker with a local branch network the length of the country. Jonathan McArdle, Insurance Broker & Risk Management Consultant at Marsh Commercial, outlines the steps logistics businesses can take to help minimise insurance premiums.

Product damage and injury caused by collapsing pallets or products shifting during transit is a commercial battle for many in the logistics sector. Spending on packaging is often considered dead money to senders and they will try to incur the lowest possible cost, which is often at odds with what is actually needed to protect goods from damage in transit.

Insurers will defend a claim to the sender where there is evidence of poor packing, but responsibility is generally passed back to the sender to identify poor packaging and seek greater investment to reduce rejection rates.

If cartons or crates are stacked in several layers on top of one another, the lowest layer must be able to withstand the weight of the items stacked above.

The requisite stack strength depends on the packaging material, transport time and moisture conditions.

Specific information around this type of claim is not something which is readily available from insurers. Any damaged goods that are claimed for are likely to be recorded against that description rather than poor packaging and any injury would probably be recorded as a crush rather than the proximate cause of packaging specifically.

The majority of employers' liability claims that insurers handle are around poor practice or lack of training, rather than the packaging itself.

From a claims perspective, if your business makes claims due to damage or injury as a result of poor packaging, your risk is likely to be less favourable at renewal stage to alternative insurers. You may see increased costs in your insurance premium or, in the worst-case scenario, you may be unable to secure the cover you need if your business is seen as too much of a moral hazard.

Why you need an effective risk management programme

A risk management programme can help reduce accident frequency, severity and associated claims by providing more control options. It also presents a better risk profile to insurers, meaning potential insurance premium reductions and a reduction in uninsured damage and brand damage.

Additionally, it enables organisations to fulfil their duty of care responsibilities, helping to minimise the risk of a corporate manslaughter prosecution following a fatality.

Benefits of Institution of Occupational Safety and Health (IOSH) training

An important part of staying "future fit" is proactively and frequently evaluating your risk profile.

If a business has a history of claims, having undertaken IOSH Managing Safely training can be seen as a favourable measure to insurance companies through improving control of risk.

The Working Safely course is suitable for people at any level, in any sector, needing a grounding in the essentials of health and safety and gives an understanding of why they must "work safely".

Health and safety courses are a worthwhile investment, which are recognised and valued by insurance companies who may be willing to fund, or part fund, courses.

Additional benefits of training include bringing managers up to speed on the practical actions they need to take to handle health and safety in their teams and giving delegates the knowledge and tools to tackle health and safety issues they're responsible for on a daily basis. More importantly, it brings home just why health and safety is such an essential part of their job.

www.marshcommercial.co.uk

10

PK Ang

The EUMOS regulations, what are they and how do they work:

PK Ang, group executive director Newton research institute.



NEWTON
where innovation comes standard

PK Ang, group executive director of Newton research institute, a leading research institute offering packaging solutions for palletised loads, explains the EUMOS standards that are in place to protect against the financial and physical risks associated with unstable palletised loads.

Almost 10 billion pallet load units are moved around Europe every year, but according to Ku Leuven University in Belgium, 4% of all transported goods are damaged upon arrival. That figure represents not only a huge financial cost, but also significant physical risk.

EUMOS, the European Safe Logistics Association, works to improve safety throughout the logistics chain. It is a non-profit association which relies on the exchange of best practices when working on higher safety standards for logistics.



Its standards are designed to help ensure items in transit, especially palletised goods, are properly loaded and wrapped to stop items falling over or moving in transit and causing goods to be damaged or even worse, causing accidents and injuries.

The standards it sets, while not a legal obligation, are the benchmark for specific aspects of logistics aiming for the highest possible levels of safety.

Last year EUMOS updated its 'test method for load unit rigidity' standard (EUMOS 40509:2020), ensuring cargo packed onto a Cargo Transport Unit (CTU or pallet) will arrive safely at its destination. EUMOS 40509 describes a dynamic test method to evaluate the rigidity of a palletised load unit.

The revised standard includes new evaluation elements which more precisely calculate how to secure the load on a CTU in order to avoid loose or unstable parts causing serious accidents, which it's estimated could otherwise affect 100,000 EU citizens' lives or health in the next decade.

The main focus of the revision is to define the equipment requirements to measure the rigidity of a palletised load unit on an acceleration bench.

EUMOS members all contribute to its work to increase logistics safety with the objective of reducing road fatalities and bringing them down to zero by 2050, and certainly no single party can provide optimised solutions.

The responsibility of ensuring cargo safety lies with everyone in the supply chain, from logistics companies and warehouse operators, to distributors and brand owners. At whatever point in their lifecycle you're handling or dispatching goods, the quality of pallet-wrapping is your responsibility. For example, poor initial wrapping and extended storage periods can compromise the film and the stability of the pallet, so checks and appropriate procedures at every stage are vital.

In short, good pallet wrapping reduces costs, cuts packaging waste (and CO2) and increases safety. The EUMOS Standard is a key tool in helping businesses secure these benefits.

10 Billion
Pallet load units are moved around Europe every year.



Bernard Sellars

Reducing your transit packaging costs:

Bernard Sellars
managing director
Lindum Packaging.



Bernard Sellars managing director of Lindum Packaging, explains the numerous ways in which companies can reduce their use of pallet and shrink wrap film, whilst improving performance and reducing costs.

Much can be done to reduce transit packaging costs across the industry – an endeavour we are all committed to.

High-performance manufacturing facilities need to consistently look for small margins of improvement. Through continuous and concerted collaborative efforts between manufacturers and packaging suppliers, opportunities to drive up operational efficiency and profitability across packing and transit can be realised.

Over the medium and long term, what may seem like only small savings can make a significant difference – an improvement of just 0.3% every day can result in an upturn of 100%+ within a year.

Studies with our partners show that transit packaging improvements can achieve a:

- 31% reduction in production downtime
- 27% cost saving on transit packaging
- 53% decrease in packaging waste
- 54% less cash tied up in stock

To drive such improvements, businesses must take a holistic view of their operations and seek efficiencies in four core areas.

Equipment

Businesses are too often fixated on the cost of equipment and materials. Comparing the cost of a roll of wrap and choosing the cheapest may seem like an obvious way to reduce cost, the reality is it is more likely to create costly downtime and necessitate more packaging to do the job.

Small shortfalls in the products bought often compound into significant costs over a relatively short period of time. These include:

- Pallet wrap wound too tightly on its core which causes snapping and leads to operators discarding rolls before they are fully used
- Pallet wrap rolls that do not contain as much wrap as expected

Choosing the right pallet wrap and materials is a balance of performance and cost in use. There are also subtle product dynamics that can influence the decision and these must be fully understood before a decision is made.

Machine maintenance and set-up are equally key. Poorly maintained or wrongly set-up pallet wrapping machines may cause the wrap to snap. A common solution is to increase the strength of the wrap by specifying a more expensive product, but this only treats the 'symptom' and adds unnecessary cost.

Pallet wrap snapping, refilling hoppers with packaging products, and products falling off pallets before they are wrapped all contribute to downtime and can be significantly reduced by using the correct solutions.

People

Loose processes and a lack of awareness all contribute to inefficiency and cost. No matter how committed and knowledgeable operational teams are, there are always ways to support their development which will significantly effect process success.





Process

Maintaining high production levels ensures an increased return from the assets of the business. Reducing stoppages caused by packaging failure and roll changes also reduces the human cost.

There are also notable losses associated with damaged goods. There are three easily quantifiable costs:

- Writing off product where they have invested time and raw materials
- Administration of the recharge or claim from the customer
- Delivering the replacement goods

A fourth and potentially greater cost is reputational damage which can be significant and difficult to quantify.

A fundamental change is to ensure that pallets are stacked optimally. There are many approaches with real and perceived benefits to the various methodologies. Ultimately, businesses need to maximise the amount of product per pallet without compromising stability, this reduces; the cost to transport; transit packaging required and the risk of damaging goods.

Many businesses fall back on using more pallet wrap to ensure the pallet is stable. However, this is the kind of inefficiency that leads to prices creeping up in the long-term.

Sharing best practices and using common products across lines and sites is another area where process efficiencies can be created. Not only are there the efficiency gains in continually honing best practice but there are administrative, costs, and stock holding savings to be made by developing strong, long-term, strategic partnerships with fewer suppliers.

Manufacturers must look to packaging suppliers that offer high-performance machines and the expertise to offer guidance on best-practices and continuously find innovative ways to deliver downtime, cost, waste and stockholding improvements.

www.lindumpackaging.com

An improvement of just 0.3% every day can result in an upturn of 100%+ within a year.

Thanks to all our contributors

As always we'd welcome your thoughts and comments, so please get in touch if you'd like to discuss any of the issues raised in this report.

Lindum House, Beels Road, Stallingborough,
Lincolnshire, DN41 8DN, United Kingdom.

t. +44 (0)1469 574 480

e. getless@lindumpackaging.com

w. www.lindumpackaging.com

