

eureka

Issue 28

Spring
2017

www.eurekapub.eu

THE MAGAZINE FOR THE MATERIALS HANDLING PROFESSIONAL

Time to get ready

*Prepare your business for the
UK's EU departure*



Where do I build?

*Choosing the right warehouse
location in Europe's changing
logistics landscape*



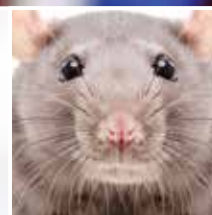
Lifting the standard

*How to make materials handling
safer on construction sites*



Agents of destruction

*The growing importance of pest
management in warehousing
and logistics*



eureka issue 28

"It was Archimedes who observed that the power of levers could be used to move the entire world." This publication is named after his famous exclamation of 'eureka!', literally, 'I've found it.'



The magazine for the materials handling professional

As we publish our latest edition of eureka, spring is not the only change in the air. The theme of change – and the need for materials handling professionals to respond to it – runs throughout our articles.

For our friends in the UK, and those who do business with them, 'Brexit' is sure to bring changes. The full effects of Britain's departure from the EU remain to be seen, but **Ruari McCallion** brings some clarity and suggests actions in preparation for the new situation.

Rapid change in the European logistics landscape is making the choice of warehouse locations increasingly complex. **Gian Schiava** explains how and why, in an article which looks at today's logistics hotspots and advises on what should be considered when planning the location and structure of future warehouses.

Amongst the additional safety challenges for forklift truck operators in a construction environment are the constant changes in site layout, building activities, on-site personnel and weather conditions. The answer, as **Gay Sutton** explains, begins with thorough planning.

Changes which are escalating the threat to businesses from pests include increased opportunities for species to enter the supply chain and reduced customer tolerance of contamination. **Mark Nicholson** examines the costs of ignoring pest risks and advises on preventative measures.

We hope you will find the information in these articles useful and we strongly encourage you to send feedback. If there are particular topics you would like eureka to cover in the future, please let us know. You can email comment@eurekapub.eu or message us via our website www.eurekapub.eu.

Monica Escutia
Commissioning Editor

Issue 28 - Spring 2017

Commissioning Editor:
Monica Escutia

Associate Editor:
Virpi Tynkkynen

Contributing Editors:
Mark Nicholson, Gian Schiava,
Ruari McCallion and Gay Sutton

Art Director:
Dave Hobbs

Produced by:
gu9creative

Printed & Distributed by:
BTB Mailflight, UK

Published by:
Cat® Lift Trucks, Hefbrugweg 77,
1332 AM Almere, The Netherlands

©2017, MCFE. All rights reserved. CAT, CATERPILLAR, BUILT FOR IT, their respective logos, 'Caterpillar yellow' and the 'Power Edge' trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission. All material is strictly copyright and all rights are reserved. No part of this publication may be reproduced in whole or part without the prior written permission of the copyright holder. Opinions expressed in eureka are not necessarily those of Cat Lift Trucks (MCFE B.V.) or its dealers. Cat Lift Trucks (MCFE B.V.) does not accept responsibility for the opinions or information expressed in the articles or advertisements.

OEPC1606(03/17)gu9

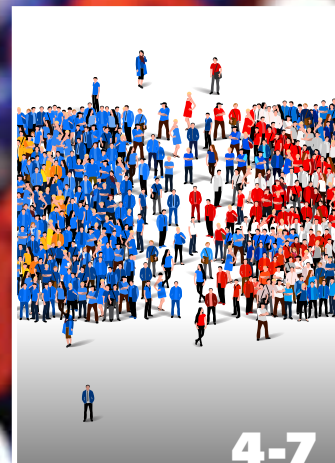


eureka's commissioning editor is **Monica Escutia**, a Bachelor of Communications – Journalism. She is a Spanish national and fluent also in Dutch, English and Italian. Having previously edited a variety of international media she has spent the last 14 years in the materials handling industry – the first four as a parts sales representative for several European countries, before becoming the EAME Manager Marketing Communications for Cat Lift Trucks, based in the Netherlands.

Don't forget
to visit the eureka website
www.eurekapub.eu
where you have access to the archive
of useful articles and features.
You can also post comments and
suggestions about the magazine
and future articles you'd like
to see covered.



Visit **eureka** online!



UK's EU departure
Time to get ready

Although many impacts of Britain's Referendum decision are hard to predict, we can be certain that the world of warehousing, logistics and materials handling will be affected. **Ruari McCallion** sums up what we know so far – and advises on how businesses can prepare themselves for the challenges ahead.



Warehouse siting
Where do I build?

In a rapidly changing European logistics landscape, choosing the best location for a warehouse is becoming a more complex task than ever. Exploring the changes, and the reasons behind them, **Gian Schiava** highlights today's logistics hotspots and identifies key factors in siting and structure that now need to be considered.



Construction site safety
Lifting the standard

Already one of the most hazardous of workplaces, a construction site presents forklift truck drivers with an additional set of unique and dynamic materials handling and safety challenges. As **Gay Sutton** discovers, the solution depends on thorough planning, good housekeeping, a culture of safety, and providing the right tools.



Pest management
Agents of destruction

With so many potential points of entry into the supply chain, the threat of attack from pests should never be ignored in any warehouse, distribution centre, logistics or transport operation. **Mark Nicholson** spells out the costs of failing to take preventative action and gives practical advice on reducing the risks.

Events Calendar

Date, Event, Location, Website	Overview
14 - 16 March 2017 INTRALOGISTICS EUROPE Paris Nord Villepinte, Paris, France www.intralogistics-europe.com	There have been significant changes in logistics warehousing: handling robots, automated conveyors, autonomous guided vehicles, drones, connected objects, voice recognition, connected glasses and remote monitoring are part of today's intralogistics innovation. Communication within the warehouse is extensive as it enters the era of Logistics 4.0. These developments serve a purpose by improving productivity, safety, flexibility and quality while reducing the burden for employees.
14 - 16 March 2017 SITL PARIS Paris Expo Porte de Versailles, Paris, France www.sitl.eu	SITL Paris brings together all the innovative products and services dedicated to the transport of goods, freight forwarding and the logistics chain. It is the most complete concentration of transport and logistics users from manufacturing, retail and distribution who are searching for new service suppliers.
27 - 29 June 2017 TOC CONTAINER SUPPLY CHAIN: EUROPE RAI Amsterdam, The Netherlands www.tocevents-europe.com	TOC Europe is the global meeting place for ports, terminals, shipping lines, 3PLs & shippers. TOC has long been considered best in class by container terminal operators and their suppliers. The exhibition is a showcase for port and terminal technology and operations and the conference focuses on collaboration within the container supply chain.



PEOPLE GET READY

How warehousing, logistics and materials handling should be responding to 'Brexit'.



Around 44% of the UK's exports go to EU countries.

The UK's decision to leave the EU has generated uncertainty across Europe. **Ruari McCallion** tries to firm things up a little.

The UK's Referendum vote to leave the EU was unexpected, to say the least, and generated quite a lot of uncertainty, which is something that business generally hates.

The immediate reaction was turmoil in the stock and bond markets but, when it became apparent that the world had not actually come to an end, things settled down and commerce continued and even picked up a little in Q3 of 2016. However, things will not be the same in the future. Things are going to change.

'Brexit' looks like it will take place in Q1 or Q2 of 2019. That gives business two years to prepare. During that time, nothing will fundamentally change; the UK remains a member of the EU until the UK government enacts laws to repeal or amend the European Communities Act 1972 and

consequent legislation. All existing laws and regulations remain in place until then.

The rest of the EU will probably continue as it was; it will only be trade with the UK that is affected.

New challenges, new requirements

Negotiations have not even started yet, and are a long way from complete, but there are quite a few things that businesses can do to prepare themselves for the 'new world order'.

Around 44% of the UK's exports go to EU countries. Businesses involved with complex supply chains, especially those in the auto, aerospace and chemicals sectors, may see components cross borders several times before the finished product rolls off its final assembly line.

It will become necessary to calculate more closely the →

BREXIT IMPACT IN BRIEF

- ▶ Nothing changes until the UK actually leaves the EU, which will be around two years after 'notice to leave' is triggered under Article 50 of the Lisbon Treaty
- ▶ If the UK leaves the Single Market and Customs Union, taxes on cross-border trade may once again be levied
- ▶ Whatever the outcome of future negotiations, the 'worst-case scenario' for companies operating across international borders will be that defined by WTO (World Trade Organisation) rules – which stipulate tariffs of around 10%
- ▶ As 30% of the UK's supply chain is localised, the impact on costs as a result of tariffs alone will probably be under 7%
- ▶ Pre-existing 'Double Taxation Agreements' (DTAs) will reappear, as they were not formally repealed (companies operating across borders will thus still have a measure of protection against double taxation) – however, the UK does not have DTAs with some accession states
- ▶ Certificates of Origin may be required for EU trades
- ▶ Proof of Exporter status may be required for some countries in the EU



value of components that cross borders and are sub-assembled then finally assembled before being installed in the product. Why? Because, currently, there is no tax, customs duty or tariff on products or materials crossing internal EU borders; that will not automatically be the case after Brexit.

While there may be a new set of exemptions, with a re-emergence of bonded warehouses and/or 'freeports', there is the distinct possibility that the post-Brexit tax regime might be onerous and complicated. It is best to be prepared, and to have at least explored the options for the return of customs barriers.



1. Guy Courtin,
Senior Vice-President,
GT Nexus.

2. Bernardine Adkins,
Gowling WLG, Solicitors.

Increasing complexity

"Many companies are currently thinking of free trade agreements in 1970s terms, and mainly about the movement of goods," said Bernardine Adkins of Gowling WLG, Solicitors. "Modern free trade agreements are very complex."

Fortunately, warehouse management, logistics operations and materials handling professionals aren't directly concerned with the complex negotiations; they just have to deal with the repercussions. And those are complicated enough.

"If you take the auto industry, for example, there is a lot of momentum in trade between Mexico and the EU," said Guy Courtin, Senior Vice-President, GT Nexus, pointing out that it is not just EU-UK trade that is affected. The UK has trade arrangements via the EU with other parts of the world. There could be a lot of work ahead.

So how does the supply chain go about sorting things out? It is probably best not to wait to be told what to do by government – and a lot of building blocks are already in place.

"This is – at heart – an issue of data and process to meet compliance requirements. As such, it is no different to the many technology projects undertaken successfully across the world each year," Courtin said. "It is likely to be on a scale that dwarfs a lot of those that have come before it, but make no mistake: aside from the political dimensions of Brexit, this is, operationally, a supply chain problem. It can be solved accordingly."

Many companies are currently thinking of free trade agreements in 1970s terms, and mainly about the movement of goods.

Gather, monitor and manage data

The first step is to get a handle on the data that shows goods movement across the EU; that will enable the scale of the project to be accurately gauged. The likelihood is that it will require, in terms of technology, a cloud-scale solution, with agreed standards between the UK and EU.

Once the visibility is in place, trade between the UK and EU can be smoother and faster, whatever the regulatory, customs and tariff structure. Integration with finance systems can then begin to make VAT and duty payments quicker and easier.

"Intelligent data gathering is only feasible when organisations and trading partners are part of a holistic network that enables all members of the network to communicate and collaborate fully together," said Courtin.

"A patchwork approach for collating, interpreting, sharing and acting upon information is no longer acceptable." The alternative to open and effective collaboration will be to restrain, or even strangle, the logistics industry and export trade overall.

"The fears of additional constraints, in the form of tariffs and more controls of goods leaving and entering the territory, are legitimate and profound concerns, for businesses and politicians alike," he emphasised. Such restraints threaten economic competitiveness.

In order to overcome any such hurdles, and to maintain profitability, robust and real or near real time view of the supply chain networks will be critical.

Article feedback is welcome: editor@eurekapub.eu

2



BREXIT 'TO-DO' LIST

ANALYSE trade patterns across the EU, looking back and forward – about three years in each direction

IDENTIFY key European markets and customers, along with key UK markets and customers

CONTACT Tax Authorities for preliminary advice and guidance, or at least to identify points of contact as the picture develops

COMMENCE negotiations with freight forwarders and consider how to consolidate numerous small transactions into larger shipments

CONSIDER Authorised Economic Operator status, especially for complex, multi-country supply chains such as those in the auto, aero and chemical industries – it may allow self-assessment of 'trade value' for purposes of taxation and tariffs

CONSIDER bonded warehouses

PREPARE to reconfigure warehouse management systems, to take into account customs and duty status

ENSURE IT systems are equipped to deal with additional paperwork and new movement regulations

PREPARE and plan alternative routes for distribution and delivery

DISCUSS with production departments the possibility of adapting the 'production footprint': EU plants to supply EU territories and UK to supply Rest of the World

IDENTIFY employees who are non-UK EU nationals or non-UK nationals, whose working status may change after Brexit

WHERE DO I BUILD MY WAREHOUSE?



How and why the European logistics landscape is changing

Before deciding how to shape a materials handling operation, companies need to consider where to build their new warehouse. E-commerce has revolutionised the game, and supply chains and markets are undergoing serious changes.

Gian Schiava explores several recent surveys and helps us discover the best logistics hotspots in Europe.

The choice of location for a warehouse is already a difficult one if the company only operates in one country. In some cases, companies decide to operate with regional depots served by one national distribution centre. Others may prefer to use just one large distribution centre.

These decisions are affected by, for example, the product range, infrastructure, expected growth, local building regulations and, of course, cost and availability of real estate. After all, not many can afford to build a complete new warehouse. The alternative is to outsource to a 3PL (third party logistics) supplier who can perform many of the logistics activities, including stock ordering and invoicing.

Even in the case of a company which just operates nationwide, it will most probably still import goods. They may be deployed in the production process or simply be part of the overall product offering. One therefore has to consider the proximity to ports or airports, and how easily goods can be transported (by rail, road or air) to the warehouse.

Companies operating in different European countries have even more issues to consider. Where are the best locations to set up your new warehouse if you operate across the whole of Europe? What are the key influencers of this choice? Let's take a look at a few recent research reports and publications.

Europe's most desirable locations

In a 2016 survey by real estate supplier Prologis, in partnership with business intelligence provider eyefortransport (eft), we are given an overview of the most popular logistics locations in Europe:

Top 10 in Europe

	2013	2018
1	Venlo	Venlo
2	Antwerp-Brussels	Rotterdam
3	Rotterdam	Antwerp-Brussels
4	Rhein-Ruhr	Rhein-Ruhr
5	Madrid	Pan-Regional Romania
6	Liège	Ile-de-France
7	Central Germany	Madrid
8	Pan-Regional Romania	Liège
9	Ile-de-France	Frankfurt am Main
10	Düsseldorf	Central Germany

Figure 1



Apparently, the desirability of a location is mostly influenced by: **1)** proximity to economic networks and strategic transportation access; **2)** proximity to customers; and **3)** labour availability and flexibility. **Figure 1** shows a 'map', indicating the level of activity.

Given the ports in Antwerp and Rotterdam, it should be no surprise that locations in the Netherlands and Belgium are still in the lead, but it is also clear that Central and Eastern Europe are closing the gap quickly. Also, thanks to the proximity of large, wealthy populations, the position is still good for Ile-de-France and key German locations like Frankfurt.

The survey explains that the need to balance warehousing and transport costs continues to be the core challenge. This is one of the reasons why warehouse owners expect companies to continue to consolidate operations. To put it simply, European distribution networks will increasingly take over the role of national or local networks.

Drivers for change are general economic expectations and developments (outsourcing!) or even game-changing events like Brexit or the election of Trump. But on the micro-economic level we see influencers like fuel prices, availability of staff and local wages. →



To put it simply, European distribution networks will increasingly take over the role of national or local networks.

Reports from the Dutch magazine Supply Chain Movement (SCM) show similarities with the findings of Prologis. They also highlight strong economic growth in the eastern part of Europe.

This success is only partly explained by low wages. More significant, it seems, is the increased flow of goods from Asia, now travelling via the Black Sea or, as land freight, via the Trans-Siberian rail route, and thus supporting the rise of new logistics hubs in Central Europe.

In addition, the rapidly growing GDP (Gross Domestic Product) in this region is pushing demand for consumer goods which can also arrive through fast-growing sea ports like Saint Petersburg on the Baltic Sea and Novorossiysk on the Black Sea. Finally, SCM reports notable growth for Valencia, Malta and Istanbul.

Up in the air?

The trend for consolidation may influence the size of the warehouse itself. If demand increases for modern, efficient distribution facilities we will probably also witness the rise of higher warehouses. According to American real estate specialist CBRE, we can expect a breakthrough of high-bay and multi-storey warehouses in Europe.

The first explanation is not a surprise: limited availability of land, and/or high land prices. However, that has been the case for decades in Europe. But today it combines with the growing role of order picking within the warehouse.

The e-commerce channel has shortened the pick process considerably and has turned the warehouse into a production factory. As order picking costs are generally high, companies need to make the most out of this process.

Conveyors, labelling and packing machines, and software for stock control, all contribute to a speedy process. But the real gains are made when we seek productivity in height.

Narrow aisle configurations are allowing more storage capacity per square metre and reach trucks or man-up trucks are replacing more traditional forklifts. The other option, of building additional floor levels within an existing building, is often more focused towards smaller goods in shelving systems, combined with conveyor of lift solutions.

CBRE also points to the trend for city logistics; a development which sees sites being established in and around cities. In the case of large and dense populations, logistics operations face an increasing struggle to complete the last mile. Consumers may be served better by vertical logistics sites on the outskirts of the conurbation. These well-placed, often highly automated sites will help overcome accessibility and time-pressure challenges.

Always different

The European logistics landscape has always been a dynamic one, but recent economic developments may have accelerated the pace. Logistics hubs are rising in locations that we regarded as underdeveloped just a decade ago, and this will bring jobs and prosperity to those regions. Traditional strong hubs will have to reinvent themselves and their corridors to make sure their reason for existence does not evaporate.

Article feedback is welcome: editor@eurekapub.eu

Narrow aisle configurations are allowing more storage capacity per square metre and reach trucks or man-up trucks are replacing more traditional forklifts.

1. The Cat® NR14-25N2 reach truck is ideal for narrow aisles in the modern warehouse.



Safe use of forklifts in the construction industry

Muddy, rutted access routes, and tradesmen milling around, are just some of the challenges facing the forklift operator on a construction site. How does the health and safety professional reduce the risks and improve safety? **Gay Sutton** reports.

The construction industry is one of the most hazardous environments in which to work, and forklift drivers can find themselves under huge pressure. Their sole purpose in life can seem to be keeping all the other trades going. Bricklayers may need mortar top-ups over here, drain layers may need more pipes over there.

In addition to this, the construction environment presents the health and safety professional with a series of unique materials handling challenges. The destination for materials is continuously changing as the build progresses, the site is vulnerable to wind, rain and mud, and tradespeople are moving around continuously, many of them not employed by the principal contractor.

Thorough planning is key

Planning for materials handling safety begins at the very inception of a project. One effective way to do this, according to Paul Haxell, Chair of the IOSH (Institution of Occupational Safety and Health) Construction Group, is to translate the construction programme into a series of coloured layout drawings indicating the areas of construction activity, stage by stage. →



From this, the most appropriate material storage areas can be identified for each stage of the build. Haxell said: "Using these visual aids you can see the traffic routes starting to emerge between the work areas and material storage areas, and how these are likely to evolve with time.

"I liken this to a business model: you develop a strategic plan, then you come down into increasing detail with a tactical plan for traffic management, and materials delivery and handling," Haxell continued.

Leading construction company Skanska uses a technique called collaborative planning on all projects, and a key element of this is logistics. Once the construction programme has been developed, contractor and supply chain teams from across the project meet together to work through the plan.

Initially, this involves looking at it over an eight-to-12-week period, and then drilling down in greater detail at monthly, weekly and then daily intervals. These are then reviewed or updated frequently.

RISK ASSESSMENT

The risk assessment plays a critical part in safety planning, and through all phases of construction.

Haxell has a word of caution. "It needs to be a living document. It should examine the problems, identify the right ways to control the risks, and then should be updated as things change or hazards emerge. How do you do that? Go talk with the machine operators or workers using the pedestrian routes etc."

2. Good all-round vision, as provided by this Cat® DP70N forklift, is an essential of safe operation.



Visit: IOSH website



Visit: Skanska website



1. Paul Haxell, Chair of the IOSH (Institution of Occupational Safety and Health) Construction Group.

"Health and safety is everyone's responsibility"

"The aim, from the logistics perspective, is to ensure that all trades can work effectively without treading on each other's toes, and can move around the workplace safely," explained Skanska's Senior Health and Safety Manager, Nick Wing. "It also helps to co-ordinate where materials are stored, and how and when they will be moved around the site. Outputs from the meetings are often visualised on site plans to help everyone to understand them."

Once these routes have been identified, people and vehicle movements can be segregated using barriers and designated pedestrian crossings. The continuously evolving and changing nature of the construction site, however, can make it very tempting for pedestrians to take short cuts or for drivers to cut corners.

"If construction is progressing with good speed," Haxell said, "a vehicle route that existed one day may not be the best option the next day. The danger is that the workforce, being helpful and obliging, might think: 'I can make a shorter route here if I move a few barriers and cut the corner.' And that can then conspire to defeat the well-intended logistics plan." To overcome this issue it is important to be vigilant, and supervise and monitor behaviours across the site.

Site housekeeping

Materials being delivered to the site should be taken off the highway and unloaded in a carefully planned, prepared and controlled environment. On bigger building projects, suppliers and contractors are routinely assessed for their health and safety performance and processes. Safety standards are then built into their contracts, and performance is monitored.

Skanska takes this very seriously. "One of the key elements is then ensuring the plans we've put in place are adhered to," Wing said. This not only requires monitoring and supervision, but suitable training among the trades. "We are currently working with CITB (Construction Industry Training Board) to improve the education and training of those who receive and handle materials on site."

Good housekeeping is essential across all areas of the industry. On some of the best sites, high-value materials are placed straight into containers and less weather-susceptible materials are stored in designated areas separated by barriers. Materials left in access routes or stored untidily are a hazard and should be avoided. "What we can't safeguard against", Haxell said, "is how much rain we get and how badly parts of the site may then rut through vehicle movements."

Providing and maintaining a suitable surface for safety and efficiency in the delivery area and on routes to the construction area may seem obvious, but the cost of this has to be planned well ahead and included in the tender. And, as Haxell pointed out, the cost of an extra hundred tonnes of crushed concrete or hard-core for the repair and maintenance of vehicle routes could make the difference between the builder getting the job or not getting the job. So it comes down to planning, and to managing clients' expectations.

The continuously evolving and changing nature of the construction site can make it very tempting for pedestrians to take short cuts or for drivers to cut corners.

Safety culture

Forklift truck operators are expected to undergo training and to demonstrate their competence. It is then the responsibility of the site manager to ensure they are performing in an appropriate manner and to promote an environment where operators are able to suggest improvements or report problems without penalty. They, after all, are at the sharp end and are most likely to spot a hazard or problem before anyone else.

At Skanska, there is what Wing describes as a behavioural safety programme which instils a culture of care and concern for everybody, and encourages people to speak up about issues and stop work if need be. "Health and safety", he said, "is everyone's responsibility, and this applies to anyone working on our projects."

The tools

To operate safely, the forklift driver has to have good all-round vision, particularly when reversing or manoeuvring in tight areas. An array of mirrors and a rear-mounted CCTV camera can be helpful, but the industry has developed the use of banksmen to direct the driver and provide an extra level of safety while heavy vehicles are being loaded, manoeuvred and unloaded.

Another challenge is how to communicate with the driver, particularly across a large site that spans many acres. Many companies have prohibited the use of mobile phones by plant operators, and the reasoning is not hard to see.

"The last thing you want", Haxell said, "is something beeping or flashing and distracting the operator as he's placing a load high up on the scaffold, and he's having to observe hand signals from the banksman." Many companies have chosen different technologies to solve this issue, but the technology then has to be supported by management so the drivers are not unintentionally encouraged to bend the rules.

Overcoming the unique safety hazards in the construction industry is a matter of thorough planning, continuous monitoring of site conditions and progress, and listening to those working in the field. With these elements of best practice in place, the industry can continue to improve its safety performance and the efficiency of its materials handling operation.

Article feedback is welcome: editor@eurekapub.eu

HEALTH AND SAFETY IN THE WORKPLACE

Workplace injuries in the construction sector

3,050 per **100,000** workers.

Of these:



22%
while lifting
and handling



11%
struck by
an object

This is significantly higher than the average across all sectors:

1,920 per **100,000** workers.

Construction industry injuries only surpassed by agriculture, forestry and fishing sector:

4,390 per **100,000** workers.

Source: UK Health and Safety Executive for the period 2015 to 2016

1

AGENTS OF DESTRUCTION

Why pest management is essential in warehousing and logistics

We all know that poor handling by a powerful forklift truck can destroy the value of an entire pallet load of goods. As **Mark Nicholson** warns in the following article, a single mouse dropping has the power to do the same thing.

Whether it's a dropping, a feather, a piece of nest material or an insect, evidence of contamination by pests may result in rejection of products. Even if it's a non-food delivery, and even if each item is individually wrapped, the customer might refuse to take it if the container is contaminated.

Hubs for pest transmission

Warehouses, distribution centres and their associated logistics and transport operations are in a difficult position when it comes to pest control. Pests can get into the supply chain from the outside environment through a multitude of docks or via movement of staff and visitors. And they can be shipped into your premises from all over the world.

Once there, they will often find ideal conditions in which to live and breed. They may move around to find the part of your workplace that provides the best temperature and shelter. They may also discover a variety of other stored goods to feed and shelter them.

You may not have had a serious problem to date, but you should be taking preventative action now. A pest control expert can predict and prevent infestations, saving you from a nasty surprise and a lot of expense. Importantly, your strategy should look not only at your own site but at the potential for pest problems elsewhere in your supply chain to affect you.

The cost of ignoring pest risks

Here are just some of the reasons why you should take preventative action to protect your business:

- Increasingly stringent food regulations and discerning customers – making contaminated products unsaleable
- Loss of reputation, customers and contracts
- Compensation demands from businesses to which you have transmitted pests
- Employees' morale – who wants to stay in an infested workplace?
- Spread of illness via contaminated food or air – did you know that a single pigeon's droppings and feathers can carry and transmit more than 60 diseases?
- Damage to your property through gnawing and burrowing – electrical wiring is a particular favourite for rodents
- Corrosion of metal structures through birds' droppings
- Prosecution for breaking hygiene laws
- The expense of eradicating pests – which is much higher than the cost of preventative measures

1. Mice and rats are high on the list of unwanted warehouse visitors.

2. A single mouse dropping can be as destructive to product value as a collision with a speeding forklift truck.

3. Modern pest management is much more sophisticated than this.

4. Pests can find many entrances to your supply chain.

Who are the chief pests?

While all animal species have a part to play in the web of life, some can become pests when they live in the wrong places. They include:

 <p>Rodents</p> <p>- particularly rats and mice</p>	 <p>Birds</p> <p>- especially feral pigeons and some of the gulls attracted by food we throw away</p>	 <p>Stored product insects</p> <p>- like biscuit, flour, rice and grain beetles, and meal moths</p>	 <p>Wood-boring insects</p> <p>- such as woodworm beetles</p>	 <p>Other unpopular insects</p> <p>- cockroaches, house flies and more</p>
--	---	---	--	--



Pest control and the law

If you handle any kind of foodstuff or food ingredient, whether for human consumption or animal feed, you need to abide by EU legislation. The key principles are set out in the EU General Food Law Regulation No. 178/2002, and each country will have its own further requirements.

There is also legislation relating to the spread of invasive alien species which may be damaging to human health, to crops or other areas of the economy, or to the balance of nature. EU Regulation 2016/1141 lists the species currently of concern.

In addition, the EU has laws on the use of pesticides and other pest control methods. Instead of trying to do it yourself, it's best to leave this to a good pest controller who knows the law.

How to keep pests under control

The first thing you should do is get a pest control professional to survey your site, record existing pests, identify risks and set up regular monitoring. Here are some actions you can take, in consultation with the specialist:

- Keep all potential pest entry points closed whenever possible – including loading dock and other doors, parked vehicles and pedestrian doorways
- Install barriers such as well-sealed, self-closing doors, fly screens and air curtains
- Install pest proofing, such as exclusion netting for pigeons
- Maintain a pest exclusion zone around your site's perimeter, by removing a strip of sheltering vegetation and, if necessary, asking your pest controller to monitor it
- Keep your premises neat and clean, including kitchens – and make sure food packaging saved for recycling is contained to avoid attracting vermin
- Deprive rats and mice of food, water and shelter – including access to spaces in walls, roofs and ventilation shafts – and bear in mind that some can use vertical pipes to reach higher places
- Design your racking and storage layout to include an inspection aisle between your products and the wall, to help with pest monitoring

- Make sure staff know how to recognise signs of infestation, and are aware of what should trigger a request for pest control action
- Inspect every incoming shipment for signs such as gnawing, shredded material and dust
- Segregate different types of product to avoid cross-contamination
- Rotate stock, to give pests less time to become established, and whenever an area is empty take the opportunity to inspect and clean it
- Regularly clean out lorries, containers and other transport facilities, and make sure areas where they are parked or stored are kept pest-free
- Think about the whole supply chain and not just your own premises – could your suppliers be putting you at risk?
- Keep records of pest observations, outbreaks and actions taken – these will be useful to the pest controller when working out strategies



What the professional pest controller can add

Aside from a lot of relevant knowledge and expertise, on which a cost-effective pest prevention strategy for your premises can be based, the specialist has access to the latest control techniques.

You should really leave trapping, poison baiting, fumigation or any use of chemicals to the professional. Today's technologies include things like deterrent noises and smells, insect growth regulators, insect pheromone monitors and automated baiting. There are also online systems to help in maintaining records and ensuring rapid action when needed.

Ideally, your pest controller should use an integrated pest management (IPM) approach. This involves a blend of physical, chemical and biological methods to keep the pests under control, economically and with minimal use of pesticides.

Choosing a pest controller

In the UK, look for members of the British Pest Control Association – www.bPCA.org.uk – as they are obliged to meet a range of quality criteria. A European Standard for Pest Management Services, EN 16636, has recently been established, and a number of companies have now achieved this certification.

Article feedback is welcome: editor@eurekapub.eu





“

Working with Impact gave us access to Cat® lift trucks, which have a solid reputation in the industry for sheer product-strength. This, coupled with Impact's expertise and aftersales support, made them the right choice for us.

”

John McKeever, Group Transport Manager at Brand Energy & Infrastructure Services UK, Ltd.

Our tailored approach to materials handling gives you peak productivity for the right price. And, our breadth of equipment and expertise in deploying it means that we can provide the solution for virtually any application. We're built to work with you to help your business move forward.

BUILT FOR IT.™

To find out more about our personalised support and flexibility and how it could help you, please call today:

0800 169 9789



IMPACT - the UK's sole distributor of Cat Lift Trucks equipment
New and Used Sales • Finance and Rental • Servicing and Parts
Hull | Doncaster | Nottingham | Boston | Corby | Ipswich | Birmingham | Manchester | Bristol

©2015 MCFE. All Rights Reserved. CAT, CATERPILLAR, BUILT FOR IT, their respective logos, "Caterpillar Yellow," the "Power Edge" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

IMPACT

CAT
Lift Trucks