

JUNGHEINRICH IN FOOD AND DRINK



**Get a taste
for Jungheinrich.**

JUNGHEINRICH

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EFFICIENCY. SAFETY. SUSTAINABILITY.

For any food and drink business, these are the key ingredients of operational success. As warehouses become ever-more complex, technology plays an ever greater role in creating safer, more sustainable environments that enable you to work faster and more productively.

But which technology?

In this guide, we'll explore three areas in which the latest technologies are transforming operations.

- We'll explore how lithium-ion is transforming operational efficiency and organisational sustainability.
- We'll consider the potential of warehouse automation, and ask that most fundamental of questions for every F&B business: is it worth it?
- And we'll examine how technology is helping to drive up safety standards in warehouses and loading bays, helping to protect people and organisational reputations.



LI-ION
technology



LITHIUM-ION DRIVES THE FUTURE OF FOOD & DRINK LOGISTICS

What is it that every food and drink provider needs from its warehouse vehicles?

Less downtime: Always-on trucks can't be idle while waiting for batteries to charge or maintenance to take place

Real efficiency: Truck downtime does more than impact efficiency. It puts temperature-sensitive products at risk

Safe, reliable compliance: Whatever intralogistics solution you introduce to your warehouse, it needs to be safe, reliable and compliant with strict food safety regulations.

Sustainability: Because every business is under pressure to reduce its carbon footprint and minimise its environmental impact.

Controlled costs: As long as you run gas-powered vehicles, you're at the mercy of energy markets and rising energy costs.



Why lithium-ion?

- **50% charge in just 30 mins**

In the food and drink industry, efficiency is vital. Lithium-ion (Li-ion) provides powerful, long-lasting energy - perfect for fast-paced, high-demand operations:

- Longer battery life
- Batteries can be charged during breaks, reaching 50% capacity in 30 minutes
- Li-ion trucks are able to be recharged in food processing areas as there is no gassing from li-ion batteries, unlike lead acid which requires safe ventilation
- No maintenance required
- Vehicles powered by Li-ion perform reliably even with a low charge
- Double speed stacking: Our Li-ion-powered double-deck pedestrian stackers can transport two Euro pallets simultaneously with a total capacity of up to two tons. In a sector like food and drink where speed matters more than ever, our stackers can complete internal transport tasks at double the speed.

Switch to Li-ion tech, and the typical food and drink business saves time and money.



Which lithium-ion?

Compared to other lithium chemistries and lead-acid batteries, **LiFePO4 (lithium iron phosphate) is the safest choice for the food and drink sector**. LiFePO4 is non-flammable, non-toxic, and free from harmful cobalt.

Lithium-ion supports your sustainability ambitions

- Reduce CO₂e emissions by 21%
- 95% recyclable

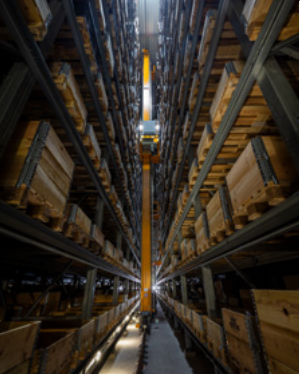
Reduce emissions: Switching to Li-ion technology can reduce carbon emissions by 21% compared to lead-acid batteries.

Power your operations with solar: Harness renewable energy and you can charge your vehicles using the electricity you generate. Solar power may not cover all your energy needs, but it can greatly reduce your reliance on traditional energy sources, cutting energy costs, reducing energy risk, and driving up the sustainability of your operation.

Optimise performance: Smart battery management ensures your trucks always receive the right amount of power, where and when it's needed. Battery management systems also track charge levels and battery health, ensuring optimal performance and reducing unnecessary charging cycles. That boosts your warehouse's productivity and cuts costs.

Recycle (almost) everything: Jungheinrich's sustainable battery recycling system recovers up to 95% of valuable materials from spent batteries. From production to recycling, we've created a closed-loop system that supports sustainability - perfect for businesses looking to reduce waste and environmental impact.





JUNGHEINRICH

MULTI GAIN

AUTOMATION SYSTEMS

24x365

THE NATURAL HOME OF MATERIAL HANDLING

JUNGHEINRICH

CONNECTED TECHNOLOGY

Award-winning, home-made Warehouse Management Systems.

AUTOMATION: IS IT WORTH IT?

What handling challenges does every food and drink business face?

Operational efficiency: It's all about eliminating downtime and delays because that's what ensures delivery deadlines are met, and perishable goods don't perish.

Food safety and compliance: Any automated system you introduce must comply with stringent health and safety regulations. It's what keeps consumers, your customers and your reputation safe.

Scalability: One-size-fits-all rarely fits anyone. Every food and drink business needs a warehouse system capable of managing its unique seasonal spikes and fluctuating demand.

Labour shortages: Skilled workers aren't easy to find. Automation can help maintain production while ensuring your talent is focused on areas of greatest need.

IT integration: Any new system needs to integrate seamlessly - and painlessly - with existing IT and management tools.



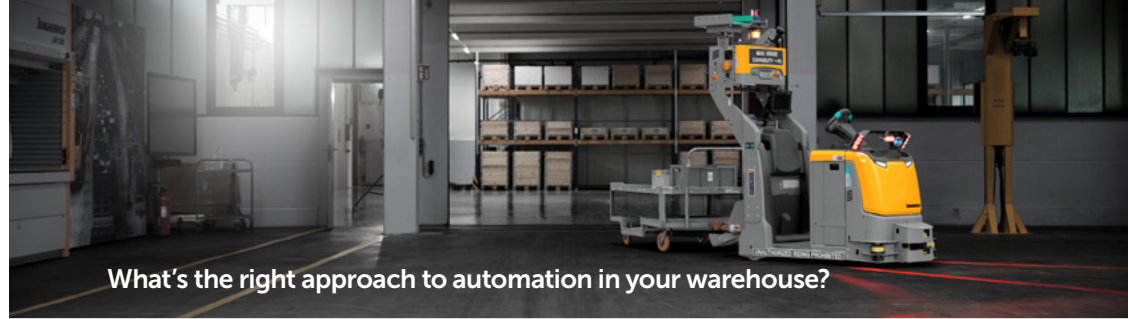
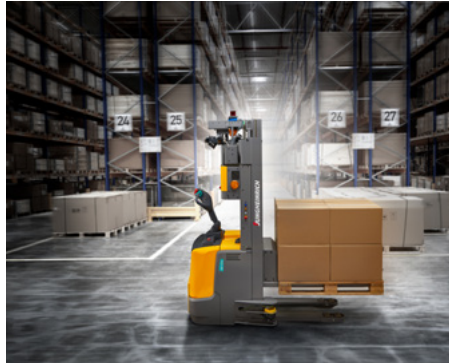
Warehouse automation: how it works

Warehouse automation systems use software and sensors to navigate and perform tasks:

Laser navigation: AGVs use laser beams to calculate their position based on the distance to an array of reflectors, ultimately triangulating its position at all times.

(SLAM) - Simultaneous Localisation and Mapping is a technology that allows a device to create a map of an area while also keeping track of its own location within that area. SLAM uses a variety of algorithms, sensors, and computations to help a device navigate an unfamiliar environment.





What's the right approach to automation in your warehouse?

If you're considering introducing automation, it's important to set realistic expectations for return on investment and allow time for proper implementation and testing. Understanding where your business currently stands and identifying areas where automation can add value will ensure long-term success.

Take the following steps when planning your automation journey:

1. **Think ahead:** Choose scalable automation solutions that grow with your operations and help improve storage density and operational efficiency. That will help you to avoid building oversized systems that may sit idle for much of the year.
2. **Use data to drive decisions:** Analyse material flow and operational data to identify areas where automation has the potential to deliver greatest impact.
3. **Choose the right partner:** Work with a trusted partner who understands the specific challenges of the food and drink sector and can provide tailored solutions.
4. **Be strategic:** Avoid chasing trends. Automation in the food and drink sector isn't just about implementing the latest tech - it's about creating solutions that meet your operational needs efficiently and sustainably. Focus on those needs.
5. **Sort your IT first:** Before introducing automation, ensure your IT systems are ready. Your WMS, WCS, and ERP tools need to be up-to-date and well integrated to support seamless operations. You'll also want to ensure that any new automation you introduce will integrate with legacy systems. Your automation partner should help you with this.
6. **Set clear goals:** Align your automation strategy with your broader objectives, such as managing seasonal peaks, improving delivery times, or expanding your product range.

Is warehouse automation in food & drink worth the investment?

Warehouse automation has the potential to transform food and drink operations, but it requires a 'reason to be' and a well-planned strategy to deliver real value.

Follow the above steps and work with your automation partner to build a business case, identifying opportunities, risks and the ways in which automation can support your business needs.

With the case for automation established, you'll be able to ensure investment is aligned with the long-term needs of your business.



TASTE TEST: THE PATH TO AUTOMATION ACCEPTANCE

Automation is powerful. Impactful. It changes the nature of your warehouse operations, the speed with which you operate and the productivity of your operation. Some may feel threatened by that, but when you bring your people with you on automation implementation, you'll discover acceptance quickly turns to enthusiasm.

The 7 steps to acceptance

- 1 Explain the 'what' and the 'why':** Ensure your people understand what's being proposed, what technology you are planning to bring in, and the business case for it. It will help them understand what the technology can (and can't) do, and reassure them about their positions.
- 2 Work with experts:** Collaborate closely with your automation provider to ensure seamless integration, tailored to your needs, with minimal disruptions.
- 3 Involve your champions:** Connect your most experienced staff with the experts, so the experts understand the unique issues affecting your workplace, and so the staff know that their voice has been heard.
- 4 Provide training & support:** Offer interactive Q&A sessions and training modules to help your staff get comfortable with the new technology.
- 5 Empower key employees:** Train selected employees to become automation experts who can guide and support their colleagues.
- 6 Collect feedback:** As you roll out automation, gather feedback from employees to address concerns and showcase early successes.
- 7 Keep communication open:** Regular communication is essential to ensure smooth adoption and address any ongoing concerns or challenges.

GOOD FOR YOU: CREATING SAFER WAREHOUSES FOR PEOPLE, PRODUCTS, INFRASTRUCTURE & DATA



What safety challenges do all food and drink manufacturers face in their warehouses?

Racking risks: Food and drink warehouses are often fast-moving environments. Without protection systems, that speed can lead to an increased risk of racking damage from truck collisions.

Protecting personnel: Every warehouse that puts people and vehicles in close proximity creates danger for pedestrians.

Product damage: Unless operatives really can 'handle with care', products, people and profit are at risk.

Operational efficiency: Safety is critical, but how do you ensure it while maintaining compliance and efficiency in warehouse operations?

Data security: How can food and drink businesses protect sensitive data while leveraging automation for operational benefits?

The big four: how tech supports safety in food & drink logistics

- Protecting infrastructure:** Regular (human) inspections of racking and storage systems are essential to ensure your infrastructure remains safe and compliant. But smart hazard management, such as visual and acoustic alerts, can reduce collisions, prevent accidents in high-traffic areas, and reduce the risk of inspections revealing unwelcome surprises.
- Protecting personnel:** Technologies like speed control, warning signals, and restricted access areas keep staff safe while they focus on their jobs.
- Protecting goods:** Assistance systems such as fork cameras, load monitoring, and laser-guided positioning ensure goods are stored and retrieved without damage, protecting your inventory (and racking), and maintaining smooth, efficient operations.
- Protecting data:** Increased automation increases a business' reliance on data, which needs to be protected. Custom fleet management systems centralise your operational data, securing it with advanced encryption and access controls. This safeguards your business and ensures efficient, secure processes.

Safety in focus: zoneControl

There's a pedestrian heading towards the loading bay shutter. On the other side, a pallet truck is approaching. No camera angle can see through the bay door. But a modern zone control system effectively can.

A zone control system uses digital 'anchors' placed at high risk areas. As a truck reaches the high risk zone, the anchor module triggers the gate opening and automatically slows the truck to a crawl to avoid collisions.

Entry can be made truck-specific, so trucks not intended for the loading bay can't trigger the door (and therefore can't be involved in a collision). And wearable 'person tags' can provide additional protection to individuals on the warehouse floor, so when a truck and pedestrian are both at risk points at the same time, everyone is notified.

[Find out more about zoneControl](#)



FOODIE FAVOURITE:
POWERLINE - SHAPING THE STANDARD IN FOOD AND DRINK

Discover the Li-ion vehicles that deliver the efficiency and safety to transform warehouse operations.



Outstanding agility

Move up to 20 % more pallets per hour than average thanks to optimal use of space.

Maximum safety

Choose the very best in protection for employees.

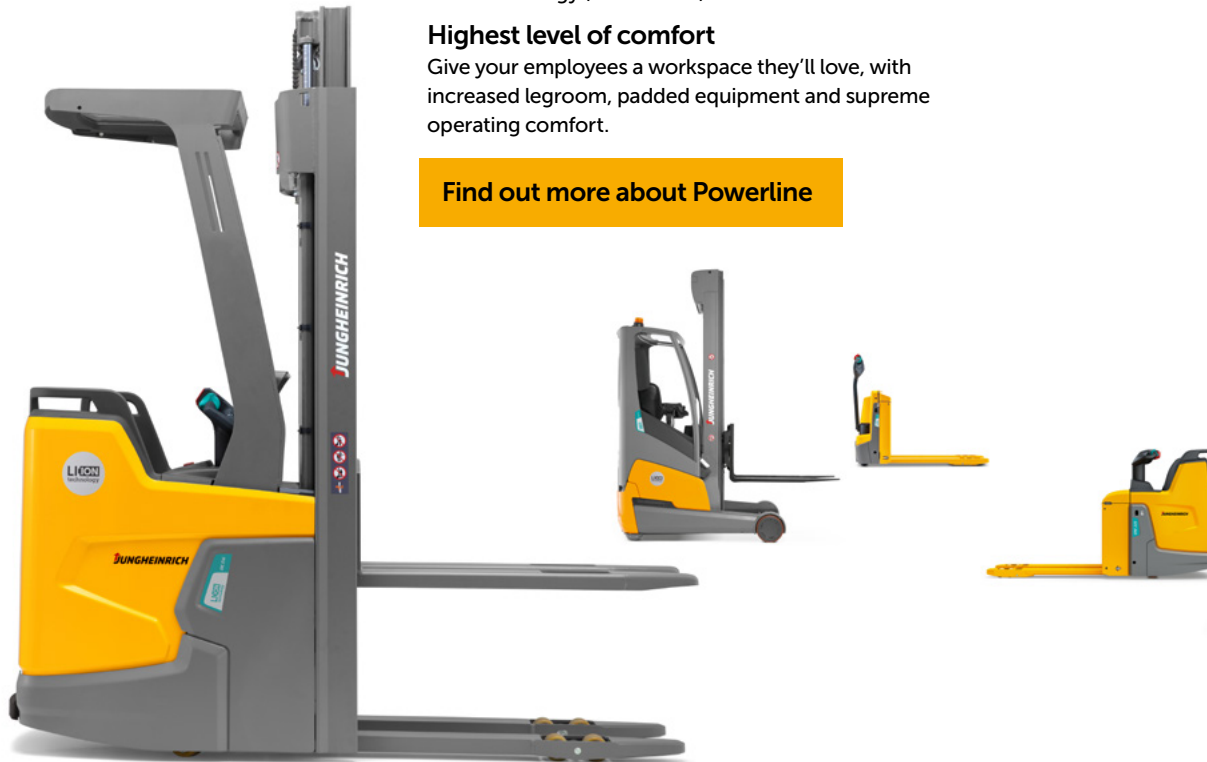
Unparalleled sustainability

Keep at the forefront of the sector with what are arguably the most sustainable vehicles in the industry - consuming 20% less energy (vs lead acid).

Highest level of comfort

Give your employees a workspace they'll love, with increased legroom, padded equipment and supreme operating comfort.

[Find out more about Powerline](#)



RENTAL



**ON TAP FOR THOSE BUSY PERIODS:
RENTAL AT JUNGHEINRICH.**

Your complement of Jungheinrich trucks and handling equipment will be based on anticipated demand. But what happens when that demand changes? Jungheinrich is ready to help.

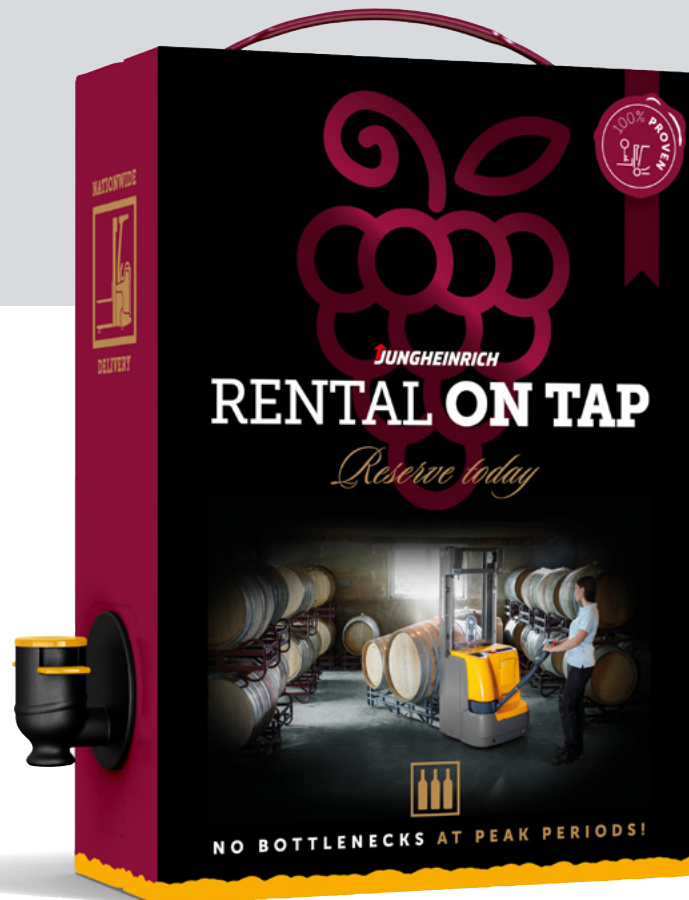
Jungheinrich's rental service gives you swift access to all the additional fork lift trucks and pallet trucks you need to manage unexpected demand and peak seasons.

With rental from Jungheinrich:

- You never have an equipment shortfall
- You never have capital tied up in equipment you don't use regularly
- You can always access the latest truck technology when you need it
- We take care of truck maintenance

And you can access all the equipment you need, anywhere in the UK, with a single call.

[Find out more about Jungheinrich Rental](#)



A TASTE OF JUNGHEINRICH IN ACTION
CUSTOMER SPOTLIGHT: JJ FOODSERVICE

**"YOU CARE." JUNGHEINRICH CUTS COST, SPACE,
TIME AND RISK FOR JJ FOODSERVICE.**



In developing their partnership, Jungheinrich discovered there was a clear opportunity to explore alternative solutions and work with JJ Foodservice to operate more efficiently and reduce CO₂e levels.

The client

For 35 years, JJ Foodservice has built a reputation for quality that is trusted by food businesses from sandwich bars to Michelin-starred restaurants. Operating from 12 branches across the UK and with over 100 trucks in its fleet, it's still a family business, able to make decisions on its own terms for the benefit of its customers and people. That includes its choice of MHE partner, with JJ Foodservice making the decision to switch to Jungheinrich.

The challenge

JJ Foodservice was using a mix of gas and electric trucks and reducing the fleet's carbon footprint and optimising operational costs were key priorities, but logistics and health and safety were also big drivers of change.

The existing fleet of MHE had been powered by 200+ batteries and the previous supplier had not explored battery change systems. The operations team were required to manually change batteries on a roller bed system. This is a common solution in the UK, however on a reach truck, where a battery can weigh the best part of a tonne, this is physically exerting and comes with H&S concerns, fatigue and logistical challenges. There was a clear opportunity to explore other solutions and work with JJ Foodservice to operate more efficiently.





Every organisation needs to change; you can't stand still. **And you need a partner who can support you in doing that.** I would say choose your partner wisely.

Kaan Hendekli
Chief Operating Officer
JJ Foodservice



The solution

'Battery benefits.' Jungheinrich supplied 100+ trucks, including counterbalances, pallet movers and reach trucks. Each truck now uses just one battery, which simply plugs in and recharges when drivers take breaks.

This saves time, because there's no longer a need for battery changeovers. It also reduces operational costs because only half the number of batteries are needed. Space where the battery change roller beds were located has now been made available and JJs have been able to store pallets in some of these areas. There is also the health and safety aspect that comes from no longer needing to change batteries.

Replacing the internal combustion engine (ICE) trucks presented, on the face of it, just as big a challenge. Unless JJ Foodservice could feel confident that its counterbalances had the necessary charging windows and charge points, they would need to remain. Jungheinrich placed a tracker on the ICE trucks to identify charging windows and optimal locations and was able to seamlessly convert to electric without disrupting any operational shift patterns.

'Double-deep vision'

JJ Foodservice warehouses operate a double-deep racking system (that is, two pallet racks placed back-to-back). This increases the storage of each warehouse but requires trucks with extendable forks in order to reach pallets in the rear bays.

At height, this had created real challenges for forklift operators who need to be diligent to avoid racking damage. JJ Foodservice's trucks already had cameras fitted, but it was clear that, with different lighting levels and racking heights, the trucks needed a site-specific camera fitted to each truck, tailored to each branch's requirements.

A range of lenses, including a wide-angle lens, now give truck operators the vision they need to reduce rack and product damage at each site. In addition to improved visibility, the narrower truck width has given a greater aisle clearance that is helping to protect valuable stock.

The 80mm gained doesn't sound like a lot, but it has made a significant difference in areas such as the cold stores - saving 1 million kg of CO₂e.



MAKE YOUR RESERVATION

Ready to transform your operation? Book your table with the UK's most trusted source of material handling solutions. Contact us at foodanddrink@jungheinrich.co.uk and let's grow together.

For further information on all products Jungheinrich can offer, simply call:

0800 357457

or visit:

www.jungheinrich.co.uk

or contact your local sales manager.