

Safety guaranteed

# UniCarriers forklifts transport fire safety systems for Johnson Controls





As the world's largest fire and security company, Johnson Controls operates numerous logistics locations worldwide with nine sites across Europe for its fire safety division. These distribution centres rely on UniCarriers' solution expertise to ensure things run smoothly in their warehouse. Twelve forklift trucks currently handle goods at the logistics centre opened in the Hertfordshire town of Letchworth, England, in 2016. UniCarriers provided a complete materials handling solution for Johnson Controls business to ensure safe, efficient vehicle operation. Johnson Controls benefit from UniCarriers 360° solution concept, which includes Equipment, Tools, Service, Health & Safety and Fleet Information. This package ensures an effective and safe material flow at this Johnson Controls location.

Some 117,000 employees work for Johnson Controls at almost 2,000 international locations, meaning the company is a global market and technology leader for intelligent building and energy technology worldwide. The security and fire protection system product ranges were added to the service portfolio when the company acquired the industrial conglomerate Tyco in 2016. Tyco started using UniCarriers warehouse trucks back in 1990. Initially, one used order picker was supplied to Johnson Control's site in Letchworth. Today, UniCarriers equips all nine European fire protection product distribution centres with industrial trucks. "UniCarriers forklifts meet our high standards in safety, reliability, performance and ergonomic design. We thus decided to choose the company as our sole materials handling systems supplier," explains Neil McCarthy, QA/EHS & Facilities Lead UK&I at Johnson Controls.

Yet another advantage are the flexible solutions UniCarriers offer to its clients in assembling a fleet. If there is a change in warehouse demands or processes at their location, Johnson Controls can adapt its fleet at short notice, thus benefiting from more reliable planning. Additionally, the forklift truck design means that many spare parts can be used across all the different vehicle models. This reduces the number of service visits, thus helping to ensure increased vehicle availability.



TX3 – 3-wheel counterbalance truck – tough, multifunctional problem-solvers



PLP stand-on pallet truck – perfect for even the most intense loading/unloading and transport operations





OPC high-level order picker moving through the aisles freely as they help to assemble customer orders



TERGO® UMS designed to perform effortlessly in the warehouse



The Blue lamp will increase safety by warning the pedestrian of the trucks proximity with a blue spot on the ground

### Warehouse design – alternative solutions for different functions

UniCarriers and Tyco, not yet part of Johnson Controls, set up completely new logistics structures in Letchworth in 2016. “We had leased a newly constructed logistics centre to supply the British market with fire protection products from the European subsidiaries. To do so, we first needed to integrate intralogistics which met our requirements,” explains Neil. The company used UniCarriers’ Logistics Analyser, a warehouse design and simulation tool, to find the ideal warehouse solution. Material flows can be planned virtually using the analysis and simulation software. Firstly, all warehouse options were simulated in combination with a variety of different handling equipment. The most

suitable option for Johnson Controls was a high-bay pallet warehouse served by reach trucks. Small and spare parts are stored on mezzanine decks linked to incoming and outgoing goods via a conveyer system. “Thanks to the UniCarriers solution, we have been able to consolidate material flows considerably in comparison to our previous warehouse,” affirms Neil. “Using forklifts able to place and remove goods at heights of up to 6 m has allowed us to reduce the number of warehouse aisles to eleven and improve warehouse efficiency.”

### Integral logistics processes

The Letchworth warehouse provides some 70,000 square feet space for 5,000 different products, ranging from fire alarm solutions to sprinkler systems. Johnson Controls

dispatches between 700 and 1000 orders daily from the centre. UniCarriers wide product range of industrial trucks help in this task. Johnson Controls uses PLP pallet trucks for transporting goods across the warehouse as well as for loading and unloading goods across the dock levellers. TX3 electric counterbalance trucks are primarily used for loading and unloading HGVs and vans visiting Johnson Controls. Within the incoming goods section, the items are counted, checked and then labelled using a standardised system. Following this, they are distributed to the individual warehouse sections: TERGO® UMS reach trucks with a lift height of 7.25 m are used in the high-bay pallet warehouse.



“The new warehouse layout with fewer aisles and higher racks has sped up our order picking process significantly. Picking capacity has improved by 30 per cent compared to the past.”

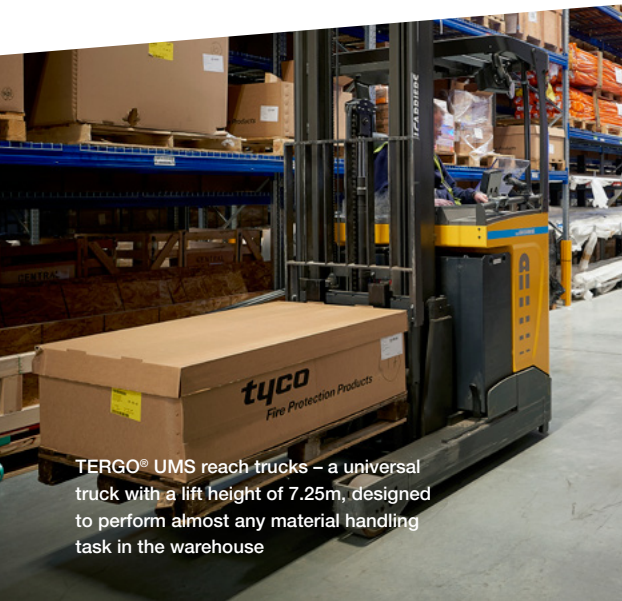
Neil McCarthy, QA/EHS & Facilities Lead UK&I at Johnson Controls



### Facts

- User:** Johnson Controls
- Industry:** Supplier of security and fire solutions
- Established:** 1960
- Branches:** Worldwide
- Direct sales:** Serving a wide range of customers in more than 150 countries
- Employees:** 120,000 worldwide





TERGO® UMS reach trucks – a universal truck with a lift height of 7.25m, designed to perform almost any material handling task in the warehouse



Multi-directional reach truck UFW is flexible and efficient, with long goods and a great reach truck for pallet transport and stacking

A TERGO® UFW multi-directional reach truck transports long goods. Up to 6.5 m long, these products are housed in special cantilever racks. The TERGO® UFW reach truck can transport long loads safely and reliably, thanks to their hydraulically adjustable fork widths. These trucks can also be driven in all directions, a decisive advantage since the aisles in the Johnson Controls long goods storage area are no wider than those in the rest of the warehouse. The spiral conveyor carries smaller items up to the mezzanine decks. OPC high-level order pickers move through the aisles freely as they help to assemble customer orders. They can pick products from heights of up to six metres. “The new warehouse layout with fewer aisles and higher racks has sped up our order picking process significantly,” declares a pleased Neil. “Picking capacity has improved by 30 per cent compared to the past.”

### Technology at the employees' service

Johnson Control's take employee health and safety very seriously, and operate a 'Zero Harm' Policy. This is also reflected in their choice of forklifts and associated equipment, which follows the recommendations in UniCarriers 360° Health & Safety module.

All vehicles feature an extensive safety package, which includes everything from seatbelts and a camera to view loads while stacking through to an overhead guard consisting of a tightly meshed metal rod grille. Vehicles are also equipped with a Blue lamp, which shines a blue spot onto the warehouse floor to prevent accidents caused by collisions with forklift trucks. The lamp increases safety by warning the pedestrian of the trucks proximity.

Besides assistance systems which help during truck operation, Johnson Controls also benefits from the ergonomic features which protect employee health. “You can see from the forklift designs that a great deal of expertise has gone into their development. Our drivers praise features such as the comfortable mini-steering wheel and the control elements which can be operated with the tip of a finger,” says Neil. Neil has been trained to instruct new employees on how to operate UniCarriers forklifts. This train-the-trainer concept also forms part of the Health & Safety module, which allows best practices to be demonstrated from the outset.

### Transparent processes thanks to fleet management

The logistics centre is in operation twelve hours a day. The UniCarriers 360° Fleet Information module provides optimum monitoring for forklifts throughout their entire period of use. The Vehicle and

Operation Management (VOM) online fleet management system on each vehicle records performance data and logs any incidents or damage during a shift. The solution analyses the performance data of the forklifts in use and helps customers to optimise the operation of their fleet as well as prevent accidents. The fleet management system thus also forms part of Johnson Controls' safety concept. Before driving off, employees carry out a pre-operation check, during which they need to answer questions on the forklift's status on a touchscreen. If a defect is identified during this process, the safety officer for the location receives an automatic message. The VOM system also checks driving licences. Employees need to renew them on a regular basis. The forklift cannot be started up if the driver's licence has expired. “We are constantly on the lookout for improvement potential in the warehouse,” affirms Neil. “Logistics Analyser and the fleet management system provide us with important information to help us identify such potential. The integral UniCarriers logistics concept thus plays a key role in our success at Letchworth.”



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