

Jungheinrich customer reference

Automated Guided Vehicle System for Alfred Ritter GmbH & Co. KG.



JUNGHEINRICH

Automated. Practical. Excellent.

Chocolate manufacturer Ritter expanded its external warehouse in Dettenhausen in order to increase warehouse capacity and optimise processes. As a total solution provider, Jungheinrich delivered a perfect combination of manual and automated components. Mobile robots, narrow aisle trucks and the logistics interface now handle the transport of approximately 37,000 pallets of chocolate raw materials per year. What makes it special: To ensure safe aisle changes and maximum process reliability in mixed operation, the trucks communicate with each other via software. In addition, the customer benefits from increased efficiency and reduced personnel costs.

PARTIAL AUTOMATION IN THE EXTERNAL WAREHOUSE.

Anyone who loves chocolate is familiar with Ritter Sport. Whether as a classic Alpine milk chocolate, in the whole nut version or vegan – already in the fourth generation, Alfred Ritter GmbH & Co. KG as a family-owned company, produces high-quality, sustainable chocolate using the best ingredients. To produce this even more efficiently in the future, the customer decided to build a new external warehouse and to commission an Automated Guided Vehicle System consisting of four mobile robots. To analyse the needs, a simulation using three to seven trucks was previously carried out, serving as the basis for the implemented logistics solution.

BALANCED ORDER PROCESSING.

In addition to four EKS 215a Automated Guided Vehicles with lithium-ion technology, the customer received two manual EKX 516k and EFX 413 lead-acid narrow aisle trucks, as well as racking systems and the Jungheinrich Logistics Interface to control the transport processes. Thanks to long-lasting, sustainable lithium-ion power and two automatic charging stations, the mobile robots manage around 60 transports per hour and impress with maximum availability. Active order balancing assigns specific work orders to the trucks, ensuring optimal fleet utilisation at all times.

COMPLEX WAREHOUSE REQUIREMENTS.

In a warehouse with manual and automated technologies, safety is paramount. Therefore, the trucks communicate with each other via the logistics interface to prevent collisions. In addition to different temperature ranges and fire protection doors in the warehouse, the transport of raw materials in big bags was also a special feature in automated material handling. Overhangs of up to 15 cm in each direc-

tion on Euro and industrial pallets required a special approach to implementation. Hennes Fischbach, the responsible Jungheinrich project manager, is proud that all components now integrate so harmoniously. "With the new setup, the customer has definitely increased its operational and process reliability."

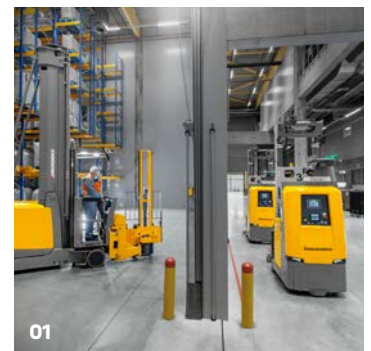
The chocolate side of automation

FUTURE-PROOF TOTAL SOLUTION.

The customer has the option of automating additional warehouse areas or expanding the fleet as needed. Since commissioning, the system has been running stably and has helped the customer to achieve noticeably greater efficiency. Should a fault occur, Ritter has taken out a full service contract, a complete, carefree package for 5 years – with a rapid connection to remote service and expert contacts. "Jungheinrich is the ideal partner for us, as everything comes from a single source and the collaboration is very harmonious," summarises Daniel Vrbán, site manager of the warehouse in Dettenhausen.

01
Smart traffic light system: The logistics interface ensures safe aisle changes by precisely coordinating the entry and exit of trucks.

02
Innovation in the field of automation: During the autonomous transport of big bags, spacers ensure that the goods are not damaged.





“Jungheinrich provided us with the perfect combination of manual and automated technologies.”

Daniel Vrban

Site manager, Dettenhausen warehouse
Alfred Ritter GmbH & Co. KG

**A word with
Daniel Vrban,
site manager
Dettenhausen
warehouse,
Alfred Ritter GmbH
& Co. KG**

What were the reasons for partial automation in the new external warehouse?

Our central raw materials and packaging warehouse in Dettenhausen has reached the limits of its capacity. All the raw materials needed to produce Ritter Sport chocolate are stored there: Cocoa, hazelnuts, almonds, biscuits, marzipan and much more. Every year, we deliver around 37,000 pallets to Production in Waldenbuch. To achieve this, we need a reliable fleet for transport within the external warehouse. Other reasons were the increasing shortage of skilled workers and our duty of care as the employer. We want to utilise our employees for important, value-adding processes. Monotonous tasks in the warehouse can now be assigned to mobile robots.

How have the processes improved since the introduction of the new logistics system?

Work has become safer and the risk of mistakes, i.e. incorrect pallet storage, has been decreased. Thanks to integrated warehouse navigation, the EKS 215a move quickly and efficiently around the warehouse. The target approach is semi-automated, easing the burden on our employees. Jungheinrich's trucks are a considerable support to us as they perform 90% of ground transport. Thanks to Jungheinrich's initial simulation, we quickly identified where we needed to take action. The most significant learning effect occurred after the handover of the system. In live operation, we gained experience with the system and continuously optimised the processes to further increase efficiency.

Were you satisfied with the collaboration and would you recommend Jungheinrich?

Right from the start, the collaboration with Jungheinrich was consistently positive. The contact was always by mutual agreement and on an equal footing. Having Jungheinrich as a large and expert partner by our side, supplying all components from a single source, was a significant advantage for us and a decisive factor in our choice. Even today, it is not yet a given in the logistics industry that Automated Guided Vehicle Systems are used in warehouses. We dared to take the plunge with Jungheinrich. Something we are very proud of. When it comes to automation, we would definitely choose Jungheinrich again.

THE PROJECT AT A GLANCE



Customer:	Alfred Ritter GmbH & Co. KG
Sector:	Food & drink
Company size:	1,900 employees
Location:	Dettenhausen, Germany
Warehouse size:	10,000 m ² floor space

CHALLENGE

Expansion of warehouse capacity at the external warehouse and implementation of an Automated Guided Vehicle System comprising 4 EKS 215a trucks alongside manual narrow-aisle trucks for the handling of ground transport.

JUNGHEINRICH SOLUTION

Four mobile robots of the type EKS 215a with Li-ion technology, two manual EKX 413 and EKX 516k narrow-aisle trucks, Jungheinrich warehouseNAVIGATION, racking systems, Jungheinrich Logistics Interface and a full service contract for five years.

RESULTS

Successful partial automation of transport logistics in the newly constructed, expanded external warehouse, significantly increasing efficiency and operational and process reliability while reducing personnel costs.

IMPRESSIONS

From cocoa to hazelnuts – approximately 37,000 pallets of packaging and raw materials are transported annually within Ritter's external warehouse.



Full service for maximum availability: expert remote service and a comprehensive service network ensure rapid assistance in the event of any problems.



For maximum work efficiency, tasks are optimally distributed to the available trucks through active order balancing.



Perfect teamwork: the mobile robots hand over the pallets to the manual narrow-aisle trucks for further transport.