Jungheinrich Case Study

HEWI gears up for the future with its high-bay warehouse and intelligent automation solution.

JUNGHEINRICH

Reliable and highly stable connections.

Quality, delivery reliability, energy efficiency and resource conservation: These are the core principles embraced by HEWI G. Winker GmbH, the world's leading manufacturer of screw nuts, in its „Vision 2025". Jungheinrich has assisted the company in this endeavour by constructing a brand new plant – boasting sophisticated logistics solutions, intelligent automation and a great deal of potential for the future.

With more than seven million parts leaving the factory every day to create couplings that are built to last for the automotive industry, tailor-made logistics solutions are essential to deal with the complex processes. In the new plant that Jungheinrich created for HEWI G. Winker GmbH & Co. KG in Spaichingen in the heart of Baden-Württemberg, man and machine work hand in hand. By amalgamating the latest logistics solutions with intelligent automation in a 3-aisle high-bay warehouse served by automated guided vehicles, the aim is to ensure maximum productivity, now and in the future.

MAXIMUM INNOVATION AND FLEXIBILITY.

Following a period of considerable growth at its plant in Spaichingen, our customer HEWI – the world's leading manufacturer of locknuts and joining technology for the automotive industry – had reached the very limits of its capacity. As a general contractor, Jungheinrich was entrusted with the development, planning and implementation of a comprehensive, automated solution. The goal: A logistics concept that sustainably improves the processes and, at the same time, creates potential for future growth.

24/7. THE FORMULA FOR SUCCESS.

The automotive industry expects around-the-clock availability seven days a week from its suppliers. Since expanding its plant to an automated 3-aisle silo-pallet high-bay warehouse with 9,888 pallet storage locations in 2018, HEWI in Spaichingen has been able to satisfy this requirement. All functional areas work closely together. Goods receipt, the high-bay warehouse, production and dispatch are efficiently connected by six ERC 215a automated guided vehicles (AGVs). A modular structure guarantees that each production area functions independently.

May I introduce Dori, Berta, Eve and Chantal.

COMPLETE SOLUTION FROM A SINGLE SOURCE.

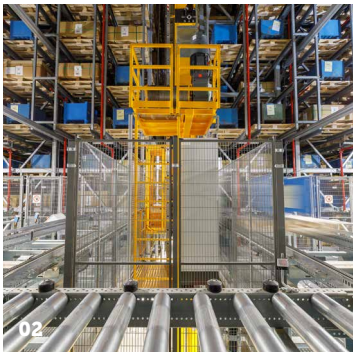
With a warehouse capacity of approximately 93 double cycles per hour and 80,000 customer pallets per year, every cycle has to be fully optimised. To ensure that this was the case, Jungheinrich supplied all the components of the logistics system solution including the racking construction, conveyor technology, rack operating equipment, control technology, material flow processor and warehouse management system (WMS) for the 15,518 square metre warehouse. Jungheinrich also provided manual ERC stacker trucks and a new truck guidance system to ensure maximum mobility.

INTELLIGENT NETWORKING OF MAN AND MACHINE.

In addition to planning and implementing the system, Jungheinrich was also responsible for the implementation of the WMS and the connection to the existing ERP system. Despite ongoing operations, the migration to the automated system was accomplished without any downtime. Initial scepticism regarding the AGVs quickly turned into enthusiasm as some 600 employees in the plant began to reap the benefits. The new automated guided vehicles are now so much a part of the team that they have even been given names including Dori, Berta, Eve and Chantal.

01
The ERC 215a lifts loads of up to 1.5 tons to a height of up to 3.1 metres.

02
Maximum throughput at top speed in the automated pallet warehouse.



> **Thanks to the holistic approach of the Jungheinrich intralogistics experts, we were able to achieve several strategic goals by commissioning the new system.**

Dr. Günther Meßmer
Managing Director
HEWI G. Winker GmbH & Co. KG

We speak to Günther Meßmer, Managing Director, HEWI GmbH

What are the key benefits of warehouse automation?
Automation serves to further optimise processes and to improve the flow of goods. Our customers in the automotive industry require reliable production and delivery services at all times. The automated high-bay warehouse offers new interim storage options to avoid overloading production. In addition, the modular solution developed by Jungheinrich guarantees maximum flexibility when it comes to managing processes.

How did you manage to convert the system during ongoing operations?
That was actually the biggest challenge when it came to expanding the plant. Interruptions in the supply chain, even for a few hours, are simply not sustainable for HEWI. For this reason, we had to be fully prepared for every aspect of the migration and conversion to the automated system. The Jungheinrich IT specialists provided plenty of support. We were able to familiarise ourselves with the warehouse management system and the automated guided vehicle systems equipped with the logistics interface middleware in advance. In addition, the experts provided us with valuable tips on the practical use of the devices and possible expansions to the high-bay warehouse.

Why did you choose Jungheinrich to assist with the project?
We were very impressed with Jungheinrich's process-oriented approach to the various production and logistics areas, as well as their willingness and motivation to tackle the task as a whole. It was a good decision because in retrospect the project proved to be an exciting process that benefited both parties in equal measure.

AN OVERVIEW OF THE PROJECT

Customer:	HEWI G. Winker GmbH & Co. KG
Sector:	Automotive supplier
Size of the company:	600 employees
Location:	Spaichingen
Warehouse size:	15.518 m²

CHALLENGE

To carry out a plant expansion and conversion during ongoing operations with the aim of sustainably improving the process flows through a seamless combination of manual and automated operation.

JUNGHEINRICH SOLUTION

Implementation of a 3-aisle silo-pallet high-bay warehouse with 9,888 pallet storage locations. ERC 215a automated guided vehicles are tasked with production supply and distribution.

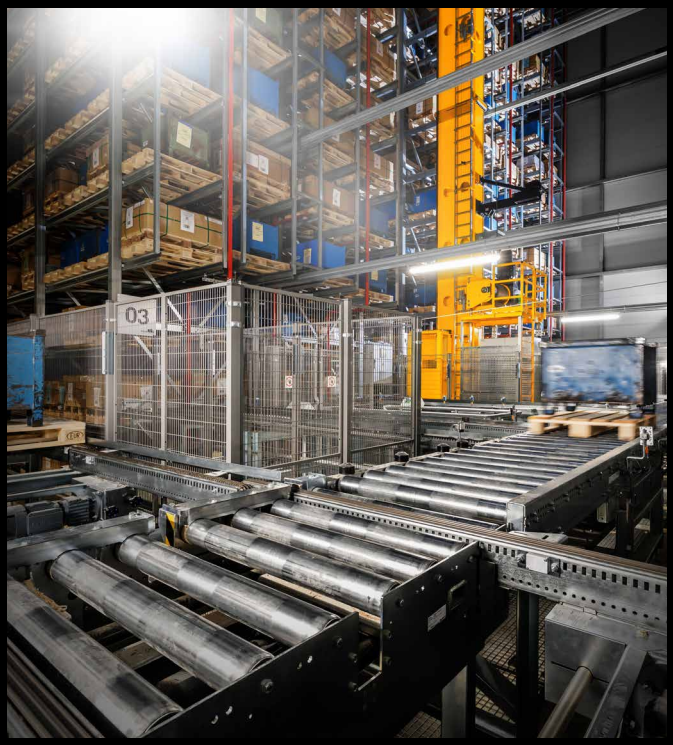
RESULTS

A fundamentally new logistics solution incorporating automated processes ensures a structured and optimised flow of goods as well as maximum flexibility by maintaining independent production units.

CONCLUSION

The compact ERC 215a reliably performs the recurring transport and stacking tasks in the warehouse.

Use of space is fully optimised in the HEWI G. Winker GmbH plant.



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