

Jungheinrich customer reference

Mobile robots and VDA 5050 fleet management for Wildeboer.



Maximum efficiency thanks to mobile robots.

To optimise processes long-term in the new logistics centre at its Weener site, Wildeboer, a manufacturer of high-quality components for technical building equipment, worked with Jungheinrich to implement a flexibly expandable automation solution with mobile robots and a VDA 5050 fleet manager. The external software controls the processes and enables the short-term integration of additional, manufacturer-independent robots. This allows the customer to react spontaneously to changes in day-to-day business. The scalable automation solution not only increases productivity many times over, but also impresses with extensive safety systems and maximum process reliability.

Wildeboer produces components for fire protection, ventilation technology, building system technology and sound insulation at its site in Weener. Its varied product range requires different transport vehicles. An autonomous mobile robot SOTO is responsible for transporting small load carriers (KLT) in three different sizes, while six ERC 213a automated guided vehicles are responsible for transporting large load carriers (GLT) such as pallets. With more than 83 pallet and pallet cage transports and 22 small load carrier transports per hour, the autonomous vehicles bring plenty of speed to production.

SUSTAINABLE AUTOMATION.

The challenge of controlling two different vehicle types with just one control system was optimally mastered by using the MHP FleetExecuter, an external VDA 5050 fleet manager. The Jungheinrich Logistics Interface acts as an interface between the MHP FleetExecuter and the peripherals, connecting the mobile robots and the processes to form an intelligent system. The open VDA 5050 solution enables the problem-free integration of additional vehicles and suppliers, giving the customer maximum flexibility in the design of their automation solution.

HIGH PROCESS RELIABILITY.

Real-time material tracking and extensive safety systems ensure the high efficiency of transport processes and smooth operation in a man-machine environment. The somewhat more complex route calculation for the mobile robot SOTO with double-deep backpack is also handled by the control sys-

VDA 5050- System in live operation.

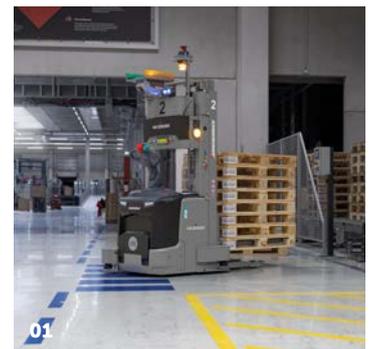
tem, ensuring maximum process reliability is guaranteed. "Overall, the customer is much more efficient with this logistics system and can respond more effectively to changing conditions in day-to-day business," says Lorenz Schuster, who coordinated the integration of the mobile robots system as Jungheinrich project manager.

INNOVATIVE OVERALL SOLUTION.

In addition to scalability and flexibility, the automated system offers the decisive advantage that operators only need one tool and do not have to acquire the expertise for a large number of software systems to coordinate daily processes. Automation does not have to be complex. In Wildeboer's case, it helps to reduce the workload of employees, counteracts the increasing shortage of skilled labour and helps the customer to adapt flexibly to changing requirements while maximising productivity.

01
Six ERC 213a automated guided vehicles are responsible for the transport of large load carriers such as pallets and mesh box pallets.

02
With more than 83 pallet and mesh box transports, as well as 22 small load carrier transports per hour, the autonomous vehicles keep production moving at a decent pace.





// Thanks to VDA 5050-Fleet Manager, we control our entire mobile robots fleet with just one piece of software. //

Marcel Stephan
Head of Intralogistics
Wildeboer Bauteile GmbH

A word with Marcel Stephan, Wildeboer Bauteile GmbH.

Why did you choose Jungheinrich mobile robots for the logistics centre in Weener?

With a population of 15,000 people, it is unfortunately extremely difficult for us in Weener to find staff for our logistics centre. To be able to exist in the long term, we must therefore resort to automation solutions. In addition, mobile robots are a perfect addition to our day-to-day business, freeing people from monotonous and ergonomically demanding tasks. Relieving our employees of redundant warehouse tasks through automation enables them to concentrate fully on other tasks. This allows us to make better use of our resources and be more productive overall.

What do you see as the key advantages of the VDA 5050 automation solution for day-to-day production operations?

With the new automated system, we have been able to optimise our logistics processes on a fundamental level. The fact that the mobile robots are available 24/7 has led to major productivity gains. We also benefit from a significant reduction in the error rate. The major advantage of the VDA 5050 fleet manager for us is, of course, that we only need one piece of software to control our various mobile robots in the warehouse. The manufacturer-independent solution also allows us to expand the fleet as needed to successfully handle production peaks.

Were you satisfied with the course of the project and would you recommend Jungheinrich to others?

Definitely yes. I don't want to gush too much now, but the whole project actually went very smoothly. Considering that it was not an off-the-shelf project, but rather a development project and a real innovation, it allowed us to work impressively smoothly through the task of implementing an automation solution with different mobile robots under one roof. In the end, we got exactly what we had hoped for: a functioning VDA 5050 system in which the vehicles operate in real time and support us in handling our daily transport tasks.

THE PROJECT AT A GLANCE



Customer:	Wildeboer Bauteile GmbH
Sector:	Technical building equipment
Company size:	Over 350 employees
Location:	Weener, Germany
Production area:	60,000 m ² production area

CHALLENGE

The operation of different mobile robots with the help of an external VDA 5050 fleet manager in a new logistics centre, as well as the reduction of throughput times.

JUNGHEINRICH SOLUTION

Mobile Robot SOTO for KLTs and six ERC 213a automated guided vehicles for GLTs, MHP FleetExecuter as VDA 5050 fleet manager and Jungheinrich Logistics Interface to coordinate the mobile robots and the processes.

RESULTS

Realisation of a modern automation system with flexible expansion options, high process reliability thanks to real-time material tracking, increased productivity and smooth use in man-machine operation.

IMPRESSIONS

The Jungheinrich Logistics Interface acts as an interface between MHP FleetExecuter and peripherals.



Smooth man-machine operation thanks to comprehensive safety systems.



Thanks to the VDA 5050 fleet manager, the entire mobile robot fleet is controlled with just one piece of software.