

Jungheinrich customer reference.

EAE 212a mobile robots at DURABLE.



Using autonomous helpers to address the skills shortage.

A shortage of personnel, high cost pressure and increasing complexity in material handling require smart solutions in daily warehouse operations. To efficiently utilise resources and reduce operating costs, DURABLE chose the latest generation of Jungheinrich mobile robots. Three EAE 212a units supplement the fleet and ensure speed in internal transport. In addition to their simple commissioning, the EAE 212a mobile robots impress with precise navigation, intelligent load handling and maximum availability. For the customer, this is a first important step in automation – and certainly not the last.

SUCCESSFUL PILOT PROJECT.

As a manufacturer of workplace equipment with global customer orders, the automation of warehouse processes is key to enabling DURABLE to handle changing order structures and increasing customer demands. Processes in the 24,000 m² distribution centre are complex, and smoothly functioning material handling is indispensable. “We spent a long time looking for the right solution for our requirements,” said Thomas Koch, Project Engineer at DURABLE. “We found it with the EAE 212a, and we worked with Jungheinrich to implement it as part of an exciting project.”

Human, machine and material flows – perfectly organised.

INTELLIGENT SUPPORT IN INCOMING GOODS.

Based on a detailed process analysis, the customer is using mobile robots in the warehouse for the first time. Three EAE 212a units handle the feeding of items into storage and distribute the pallets to various warehouse areas, allowing employees to focus on unloading HGVs. Manual EKV narrow-aisle trucks and reach trucks from Jungheinrich, also in use there, then perform actual storage operations. The result is more efficiency and greater safety, with staff carrying out fewer activities that do

not add value and the company benefiting from seamless material flows of incoming goods into narrow and wide aisles.

MOBILE ROBOTS WITH A HIGH DEGREE OF AUTONOMY.

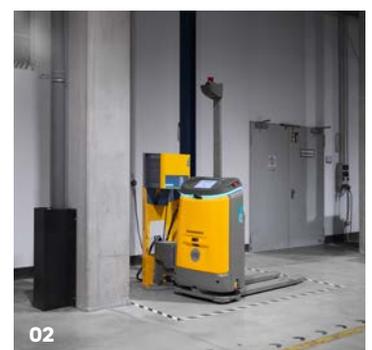
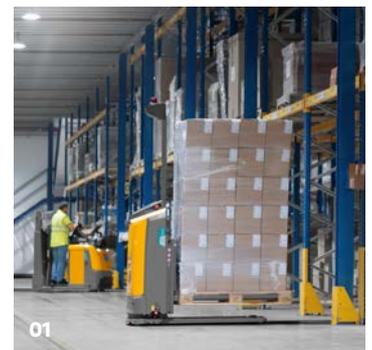
“We wanted very flexible trucks that could manoeuvre independently around obstacles and pick up pallets at floor level,” explains Thomas Koch. This is exactly what is provided by the EAE 212a. Utilising 3D cameras, they detect objects and navigate confidently through the warehouse without fixed landmarks. Furthermore, they can be integrated into existing warehouses with minimal structural changes. The initial scepticism among employees quickly gave way to the realisation that these are reliable trucks that enable straightforward, intuitive collaboration.

SUSTAINABILITY THROUGH AUTOMATION.

Powered by high-performance lithium-ion batteries, the EAE 212a boasts low energy consumption and high availability. Each of the three trucks only needs charging once per shift. The trucks coordinate so intelligently with each other that operations never cease. The targeted process support provided by the mobile robots reduces unnecessary journeys within the warehouse and ensures that other larger trucks – such as the EKV – only consume energy when they are truly needed. This creates a coordinated system of humans, machines and material flows – one that saves on resources and is efficient and future-proof.

01
Reliable human/machine collaboration: clearly defined tasks and structured processes lead to maximum efficiency in mixed operations.

02
EAE 212a mobile robots charge independently and coordinate so intelligently that processes in the warehouse never come to a halt.





“The EAE 212a mobile robots bring safety and stability to our work processes.”

Thomas Koch

Project Engineer

DURABLE Hunke & Jochheim GmbH & Co. KG

A chat with **Thomas Koch,** Project Engineer, **DURABLE** Hunke & Jochheim GmbH & Co. KG

Why did you choose the EAE 212a mobile robots?

The topic of automation has been on our agenda for a long time. We came across the EAE 212a from Jungheinrich at the LogiMAT trade fair and quickly realised that this could be the right solution for us. At our distribution centre in Iserlohn, all products from various production locations are stored, order-picked and shipped worldwide in a wide-aisle warehouse. To reduce operating costs for these complex processes and counteract the growing skills shortage, we decided to use mobile robots in our warehouse. Another reason was our enthusiasm for technological innovations. The EAE 212a is a fascinating truck that enhances our processes and staff in numerous ways.

How is the human/machine collaboration progressing, and are you satisfied with the performance of the mobile robots?

The collaboration between the mobile robots and our employees is both intuitive and efficient. Thanks to intelligent pallet recognition, the EAE 212a can handle pallets even if they are not correctly positioned. If this does not work, the mobile robot immediately informs its human colleagues so that the error can be quickly and easily rectified manually. Thanks to flexible obstacle avoidance, the EAE 212a dynamically responds to employees, trucks or hard-to-detect objects. Extensive safety systems ensure the protection of our employees and prevent collisions with machines. With the EAE 212a, we have successfully redesigned repetitive processes and can now deploy our staff more flexibly in other areas.

Would you recommend Jungheinrich as a partner for automation?

We are very satisfied with the progress of the project and hope to implement further automation solutions with Jungheinrich soon. Particular emphasis should be given to the open and transparent communication – and the swift project initiation. As soon as the mobile robots arrived at our warehouse, we were able to put them into operation. Only minor structural adjustments and IT coordination were needed. The EAE 212a can be implemented easily and cost-effectively in comparison with other complex automation solutions. Given our long-standing cooperation with Jungheinrich and our entirely positive experiences, Jungheinrich remains our first point of contact for all in-house projects.

THE PROJECT AT A GLANCE



Customer:	DURABLE Hunke & Jochheim GmbH & Co. KG
Sector:	Office supplies
Company size:	700 employees
Location:	Iserlohn, Germany
Warehouse size:	24,000 m ² of floor space

CHALLENGE

Increase in the degree of automation in the warehouse, process optimisation to reduce operating costs, and the initial implementation of three mobile robots.

JUNGHEINRICH SOLUTION

Three EAE 212a mobile robots with lithium-ion technology, hardware and software solutions, as well as service and support for the operation and maintenance of the trucks.

RESULTS

Successful implementation of the automation project with rapid commissioning of the mobile robots, a high level of acceptance among employees for the EAE 212a and many years of successful collaboration with the customer.

IMPRESSIONS



No route is too high or too narrow: in confined warehouse environments, EAX high-rack stackers handle order picking.



Thanks to intelligent pallet recognition, the EAE 212a can handle pallets even if they are not correctly positioned.



Diverse truck fleet: in addition to mobile robots, DURABLE also relies on high-bay racking and reach trucks from Jungheinrich in its warehouse.



With their high capacity of up to 1,200 kg, EAE 212a mobile robots impress with maximum agility when transporting large-volume products.