Jungheinrich WMS with warehouseNAVIGATION for Eppendorf Zentrifugen GmbH in Leipzig.

Clear structure in the warehouse and bundling of information and goods flows.



Project:

Eppendorf Zentrifugen GmbH, Leipzig, Germany

Industry:

Life Science

Task:

Implementation of the Jungheinrich Warehouse Management System (WMS) and configuration of the complete storage equipment

Project duration:

06.2013 - 02.2015

Services:

- · Jungheinrich WMS and radio data terminals
- Narrow-aisle warehouse
- Automatic miniload warehouse
- Jungheinrich electric order picker EKX 515
- warehouseNAVIGATION in narrow aisles with Jungheinrich Logistics Interface

Most important results:

- Transparent processes
- Clear warehouse structure
- Display of movements and stock in the warehouse
- Time savings thanks to optimised routes

Liquid handling, cell handling and sample handling

Eppendorf is a life sciences company that develops, manufactures and markets systems for use in laboratories worldwide. The product range includes, for example, pipettes and automatic pipetting machines, dispensers, centrifuges and mixers as well as consumables such as reaction vessels and pipette tips. With the construction of the new plant in Leipzig with a production area of $5,360 \text{ m}^2$ and a logistics area of $2,200 \text{ m}^2$, a modern production facility with efficient processes and a focus on the core competencies of CNC technology, final assembly and refrigeration technology was created.

One-stop intralogistics concept

To ensure optimal and efficient operation of the existing logistics area, a new intralogistics concept was needed. As a general contractor, Jungheinrich impressed with its ability to supply the essential solution components from a single source and to analyse all logistical processes and coordinate them in the most efficient manner.

Customised warehouse system

By introducing the Jungheinrich WMS, Eppendorf has implemented a holistic solution. All processes, from goods receipt to provision of items for production, are clearly defined. The system not only manages the products but also controls order-picking operations in the warehouse. The tailor-made storage system includes a narrow-aisle warehouse for pallet storage with 4,200 storage locations and a height of 15.5 metres, as well as an automatic miniload warehouse with 5,848 storage locations. Stacking and retrieval of goods is handled by a reach truck and a tri-lateral high-rack stacker.

The requirement

Transparent processes and ordered structure within the warehouse

Initially, the challenge was to analyse and record all logistical processes and requirements, as the company had not previously worked with any warehouse management system. This had resulted in cluttered stock and a lack of overview of relevant key figures. All logistics processes were therefore analysed in detail and subjected to testing in the project planning phase.

The aim of the new logistics system was to create more profitability, process reliability and transparency and the system had to be integrated into the existing sparse storage area. These goals were to be achieved with a warehouse management system connected to the existing ERP system.

The solution

Jungheinrich WMS and warehouseNAVIGATION

The two-stage transport procedure in the warehouse is entirely managed by the Jungheinrich WMS. Incoming goods are immediately scanned and recorded before being taken to the transfer station by the reach truck. After logging on to the truck guidance system, the terminal displays information regarding collection of goods and the transfer station to which the goods should be delivered. From here, the articles go to the automatic miniload warehouse or the narrow-aisle warehouse. By this point, the target storage location in the narrow-aisle warehouse is already reserved to prevent overlaps. The storage positions in the narrow-aisle warehouse are managed by exact location and are approached semi-automatically using warehouseNAVIGATION. Thanks to transponders in the ground, the high-rack stacker detects its current position. The position to be approached is then transmitted via the radio data terminal. The Jungheinrich Logistics Interface, specially developed middleware installed on the radio data terminal, is responsible for communication

between the Jungheinrich WMS and the truck and ensures that the information exchanged can be implemented. If a production order is triggered, the ERP sends it to the Jungheinrich WMS. The parts from the narrow-aisle warehouse and the automatic miniload warehouse are then picked and gathered together in a buffer zone before being transferred to production.

Customer statement

Process reliability and clear structure

Jungheinrich's total intralogistics solution with the Jungheinrich WMS, Logistics Interface, warehouseNAVIGA-TION and complete storage equipment has sustainably boosted profitability and process reliability in the warehouse. By optimising the route to the storage positions, an enormous amount of time is saved and searching for the right location is a thing of the past. "The bundling of all information and goods flows by the Jungheinrich WMS creates transparency at every step from goods receipt to the provision of items for production. Each phase is thoroughly documented and key figures presented in a structured manner," explains André Hofmann, Head of Logistics at Eppendorf Zentrifugen GmbH in Leipzig.



André Hofmann, Head of Logistics, Eppendorf Zentrifugen GmbH in Leipzig.

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