CASE STUDY

Reaching new heights in warehouse robotics

OEG relies on the integrated interaction of innovative software and automation technologies – and reduces walking distances in the goods issue area by 80 percent.



Snapshot

Company OEG

Industry Wholesale retail

Location Hessisch Oldendorf, Germany **Warehouse size** 30,000 sqm

SolutionUnified Control System (UCS)

For more than five decades, OEG has been supplying specialist trades, wholesalers and manufacturers on the German and international markets with urgently needed spare parts and accessories for building services. While in the early years of the company the focus was on the supply of heating spare parts, over the years the areas of tools, sanitary and installation technology, solar technology, storage technology and electrical engineering were added.

OEG is now one of the leading providers in this specialized segment. A high availability of goods and a service level of almost 100% are among the most important goals of the company.

Reduced goods throughput time to 20 min



Reduced travel in goods issue by 80 %





Investing in the future

At its headquarters in Hessisch Oldendorf, OEG started a comprehensive optimization project in 2022. With the aim of making more effective use of the existing logistics space and improving throughput times, the company decided to introduce a fully automated picking process using autonomous mobile robots (AMR). 182 goods-to-person AMR from Geekplus were put to use, which set around 4,500 shelves in motion to serve 14 workstations.

Integration is key

However, an AMR system ultimately only achieves the best possible results through seamless integration into the existing IT infrastructure. Isolated systems lead to information silos and inefficient processes, which is why process and IT adjustments can make a serious difference when introducing a new system.

The downstream cooperation with Infios opened up additional optimization potential, which further increased productivity significantly through targeted further development of the solution. This is a unique process approach that combines hybrid double cycles for incoming and outgoing goods orders and has been able to significantly increase picking performance. This was achieved by introducing a bidirectional process flow through which the employees at the workstations both load and utilize.



"It's not just software – it's the invisible clock of our robot fleet. Intelligent IT thinks for itself, reacts in real time and brings order to chaos. This is exactly what makes the difference today: smart control not only makes warehousing faster – it makes it more precise, more reliable and more resource-efficient."

Benjamin Löffeld Project Lead, OEG Germany



"With Infios, it took us six months to take our logistics processes to a new level. We have improved travel times, resource efficiency and overall throughput – and are well-set to meet the growing expectations of our customers. An outstanding achievement."

Alexander Hornemann Head of Logistics, OEG Germany

Infios' Unified Control System (UCS) created the necessary interfaces that enable continuous monitoring of the inventory of goods and orders in the operational process. At the same time, dialogues and processes have been optimized. The new workflow concept brought to light the full potential of an intelligently networked system and process landscape.

Since mid-2024, the integrated interaction between AMR and the superimposed IT infrastructure has ensured a seamless interaction on the intralogistics level. The introduction of a hybrid process at the workstations brought a significant reduction in travel distances and waiting times, as replenishments can be stored and made available immediately.

The result

With that, OEG can now process over 2.9 million orders per year in the 30,0000 sqm distribution center, where around 60,000 SKUs are managed. In addition, OEG has recorded an 80 percent reduction in travel distances in the goods issue area – and can withdraw a fifth of its employees from incoming goods to deploy them where they are really needed.

Within 6 months, all extensions were successfully put into operation. Since then, the average throughput time of an order from acceptance to packaging has been just 20 minutes.

