## Rhenus Retail Service GmbH, Minden.

Automated Guided Vehicle for increased productivity and warehouse safety.

# **D**UNGHEINRICH

#### Project:

Rhenus Retail Service GmbH, Minden, Germany

**Industry:** Logistics services

#### Task:

Integration of an Automated Guided Vehicle as a standalone solution

#### Services:

- Automated Guided Vehicle (AGV) EKS 210a
- Transport control software Traffic Manager
- Programming of 18 pick-up tracks

#### Most important results:

- Increased efficiency and productivity without altering warehouse topology
- 34 transports per hour with a daily volume of 165 to 230 pallets
- Enhanced safety through sensor technology
- Significant reduction in transport damage

## Improved in-house processes without changes to the warehouse topology

Rhenus Retail Service is a subsidiary of the Rhenus Group and has been specialising in contract logistics since 2005. The company is located in Minden with a storage area of 35,500 m<sup>2</sup>. In order to improve internal processes while maintaining the same warehouse topology, automation is gaining more relevance, especially since Rhenus Retail Service is known as a service and solutions provider for logistics.

#### Automated stand-alone solution

An Automated Guided Vehicle without system connection was chosen to avoid links with the existing high-bay warehouse and the other systems.

Since the AGV allows standardised processes, waiting and processing times as well as manual transports are eliminated.

#### Jungheinrich – a competent technology partner

By performing a test, the company wanted to ascertain whether an Automated Guided Vehicle without system connection would successfully be able to operate. The Jungheinrich AGV provided sufficient evidence that it could. The vehicle was programmed by Jungheinrich and optimised to the local conditions.

## The requirement

## Independent transport solution without connection to the system

The main task entailed the integration of a reliable vehicle into existing infrastructures, without requiring additional areas or traffic routes. Since the AGV does not need any new interfaces, it was able to meet the requirements. Even the challenge of busy traffic areas did not pose any problems for the AGV.

## The solution

#### EKS 210a - driverless and safe

The EKS 210a is an automated serial vehicle with a comprehensive safety package. The precise reflector navigation as well as additional sensors allow accurate positioning in the aisles. This required only minor changes to the existing periphery, since the conveyor technology, among other things, could also be used. Standardised procedures eliminate waiting and processing times as well as non-valuable tasks.

### **Customer statement**

#### Precise transport and increased safety

"We are already operating with automated systems, a high-bay warehouse and an unloading facility for shuttle trailers. However, the AGV was our first contact with a driverless vehicle," says Alexander Schüller, Managing Director of Rhenus Retail Service GmbH. According to Schüller, the involvement of the employees was a key factor for the successful investment in the AGV. "Our employees have accepted the solution with the AGV, because they were included in the project processes right from the start. In the past, they used to transport pallets with counterbalance trucks from the warehouse to the conveyor system of the high-bay warehouse. Today, they contribute their know-how for demanding tasks for which the company needs their experience. The task is to structure the daily incoming goods and efficiently schedule the AGV into daily operations, regarding incoming goods priorities. Additionally, the Jungheinrich AGV is ideal for standardised processes and its application is futureoriented. There is also potential for integrating even more AGVs into the Rhenus world," says Schüller.



Alexander Schüller, Managing Director, Rhenus Retail Service GmbH, Minden.

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