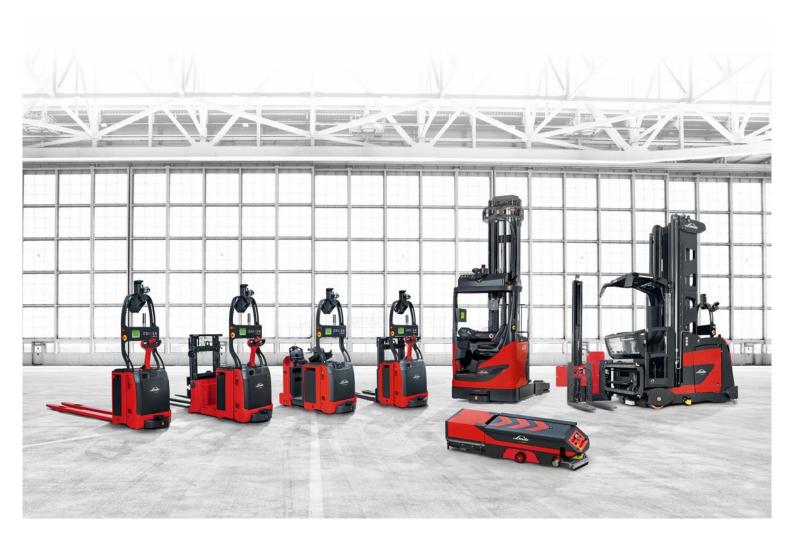


THE FUTURE STARTS TODAY

Automation and Robotics From Linde Material Handling



COMPLEX CUSTOM SOLUTIONS

DO YOU KNOW THAT YOUR WAREHOUSE CAN ALSO WORK ON ITS OWN

Areas of Automation:

Receipt of goods

Conveyor systems

Autonomous trucks, AGV

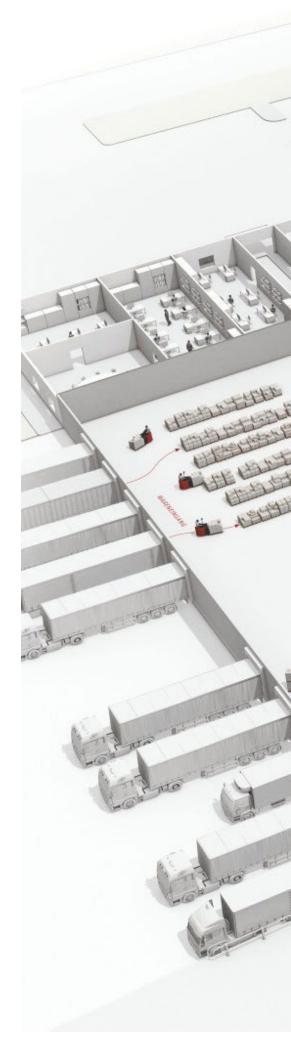
Automatic storage

Picking, picking

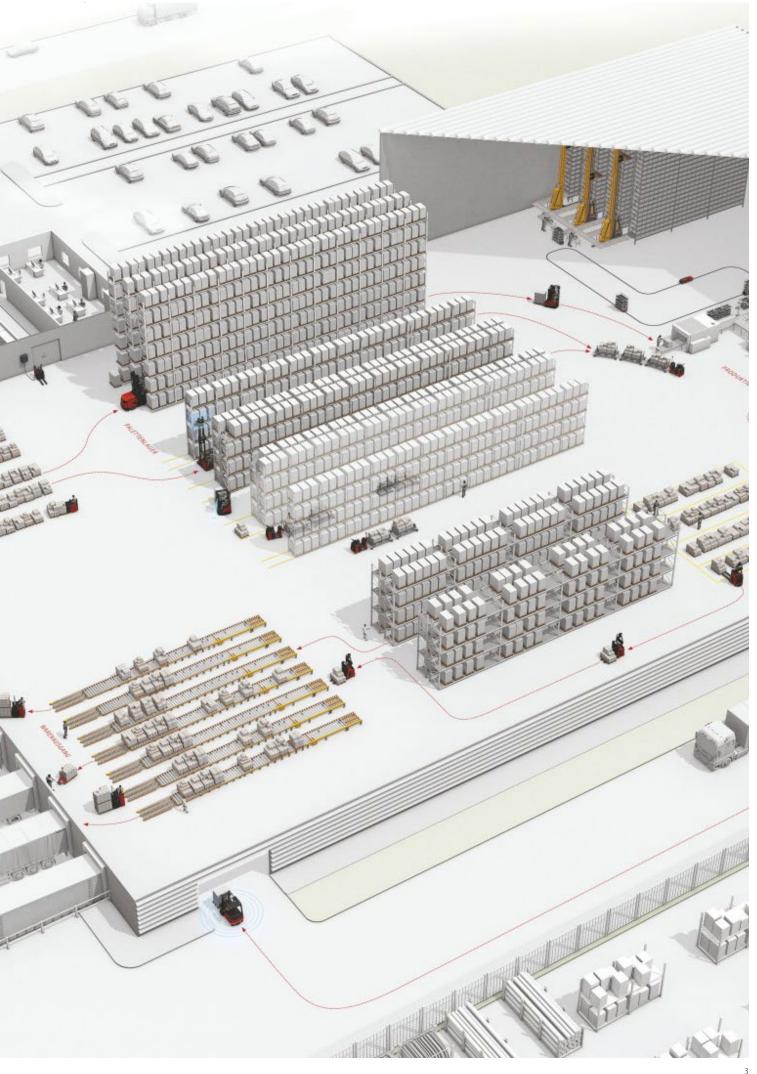
Consolidation of orders

Packing

Expedition



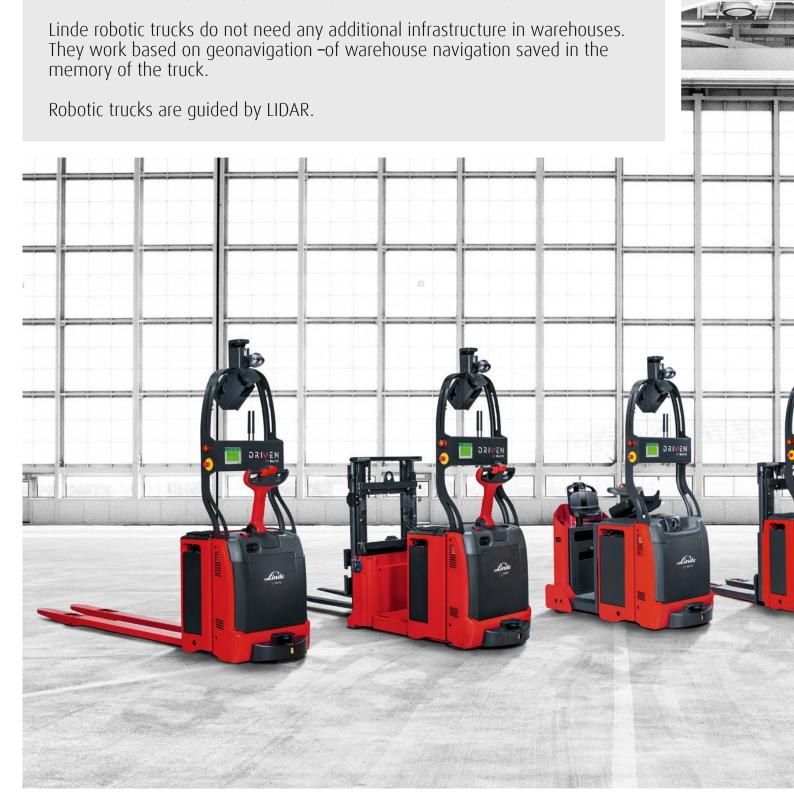
PLANNING | 3D MODELING | SIMULATION IMPLEMENTATION | CONVERSIONS | SERVICE ACTIVITY | REVISIONS AND INSPECTIONS | MANUFACTURE OF ACCESSORIES | OPTIMIZATION





ROBOTIZED FAMILY

Linde robotic trucks will solve the shortage of drivers in warehouses. You will save on operating costs and get safer and flawless operations.





Take advantage of the instant gains

P-MATIC

- Automatic supply of lines and removal of production in one cycle (circuit)
- The load is trailers
- Automatic uncoupling of trailers
- Automatic recharging





You no longer have to deal with the removal of production and supply **L-MATIC**

- Automatic supply of lines and removal of production
- Storage of factory cargo at the transfer point in the warehouse
- Lifting the load





Automate with a robotic reach truck (retrak)

R-MATIC

- Automatic storage/removal from storage
- Storing cargo in higher positions
- Lift to 11.37 m the highest in its category

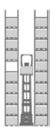




Maximize the capacity of your warehouse

K-MATIC

- Automatic storage/unloading of the warehouse at high heights and in narrow aisles
- Achieving high warehouse capacity
- 24/7 Operation





Store pallets automatically

ESMART SHUTTLE

- Increased storage capacity compared to standard shelving systems
- A modular solution that can be easily expanded
- High storage capacity
- Floor plan flexibility
- Energy savings



Store pallets automatically PALLET STORAGE

- Option to use double-deep storage
- High storage capacity
- Savings for energy and human resources
- Lower error rate of operations
- Storage height up to 40 m



8

Let your goods come to you

AUTOSTORE

- Maximum possible storage density
- High system flexibility
- Easy system extensibility
- Savings for energy and human resources
- Zero error rate of operations



Take advantage of maximum efficiency MULTI SHUTTLE & MINILOAD

- High system performance and high warehouse throughput
- High storage density
- Easy system extensibility
- Energy savings
- Zero error rate of operations
- 24/7 Operation



Your warehouses can work independently

CONVEYOR SYSTEMS

Conveyor	lines
Conveyor	111103

Sorting systems

Consolidation of orders

Robotic workplaces

Picking workplace

Express transport of goods

Packaging workplace

Checking and weighing

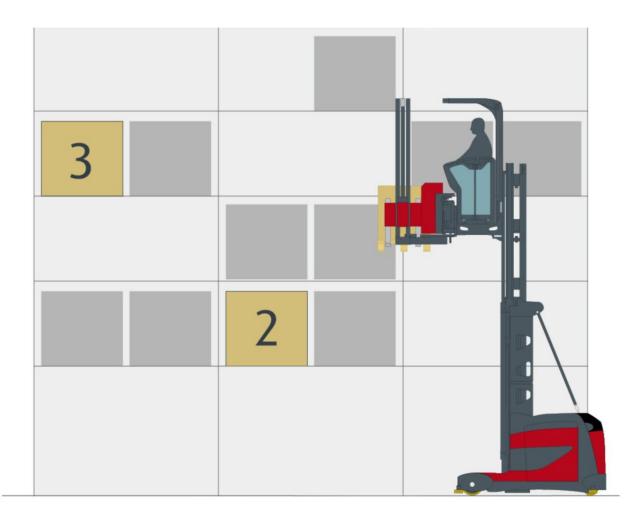




WMS (Warehouse Management System) WCS (Warehouse Control System)

- Effective organization and management of warehouse processes
- Reduction of paper documents
- Increasing the capacity and performance of warehouse operations
- Reduction of errors when working in a warehouse
- Improving the quality of shipping (accuracy, completeness and timeliness of deliveries)
- Full control over the flow of goods and their easy and fast tracking
- A reliable source of data on the state and movement of stocks
- Control of fully automated storage systems
- Support for picking technologies (pick-by-voice, pick-by-light)

MODULAR SYSTEMS CONNECTING MANY TECHNOLOGIES



LOGISTICS CONSULTING

ANALYSIS AND CONSULTING

We subject each project or assignment to a potential client to a critical analysis according to their actual needs. We provide clients with conceptual solutions that will support the future growth of their company. We propose a solution that is independent and non-tendentious.

INPUT ANALYSIS

The input analysis begins by mapping key processes, which is usually the passage of an order through the company (order to cash). After interviews with employees, during which we proceed from the lowest positions to top management, we compile the actual process model of the company. The output of the analysis is the identification of strengths, sources of waste and potential bottlenecks. Spatial analysis is performed within the input analysis. Its goal is to optimize the material flows and reorganize the spatial arrangement of warehouses to increase storage capacity or increase the flow in the warehouse.

DATA AND COST ANALYSIS

This analysis has several objectives. On the one hand, quantification of the potential benefits of minimizing waste and removing bottlenecks.

Furthermore, determining future requirements for production logistics or differences in process requirements for order processing based on customer habits or distribution channel. Last but not least, the goal is a definition of the current cost model of logistics or the supply chain.

LINDE SOLUTION

After assessing the current state and determining future requirements, solution variants are compiled. The individual variants differ technologically by the amount of investment and operating costs, flow or storage capacity.

LOGISTIC STUDIES

The measurement of logistics studies is based on the requirements of our clients. Most often, the logistics study focuses on:

- Designs of technological equipment of warehouses to ensure storage capacity and required flow through the system for the medium term.
- Proposals for the most advantageous expansion of warehouses and production within the current campus or design the most advantageous use of the land, including transport services.
- Feasibility of implementing barcodes or RFID tags for warehousing and logistics processes.
- Checking the feasibility of automation handling conveyors, sorting and packaging technologies.
- Increase work productivity.
- Optimization of inventory management and purchase of products and goods.
- Optimization of handling technology.



The **Linde Material Handling** company develops high-performance solutions for material flows tailored to customer needs and allows users to achieve sustainably competitive advantages. We are one of the **most renowned manufacturers of forklifts and warehouse equipment**. For more than 50 years, we have been defining standards in the field of safe solutions for motor trucks, fleet management and service technology as well as standards to support management.

Linde – for your performance

