

# Automated Logistics for worldwide supply.

Liebherr is one of the world's leading manufacturers of mobile cranes. The company is working with Jungheinrich to build a new centralised spare parts warehouse at its headquarters in Echingen, Baden-Württemberg. From September 2024, its global spare parts supply will be processed from there.

Liebherr's product range in Echingen includes state-of-the-art telescopic and lattice boom cranes of various sizes on mobile and crawler chassis. The range extends from 35-tonne all-terrain mobile cranes to gigantic crawler cranes with a capacity of 3,000 tonnes. In short: maximum space utilisation is required for the new spare parts warehouse.

## SYSTEM SOLUTION FROM A SINGLE SOURCE.

Jungheinrich automates the spare parts logistics for Liebherr and delivers the solution for the project completely from a single source. The centrepiece is a 6-aisle automated pallet high-bay warehouse in a silo design with 18,000 storage locations – including roof and wall cladding. At around 80 metres long, 75 metres wide and 30 metres tall, the dimensions are impressive. There is also a 2-aisle, triple-depth small parts shuttle warehouse with storage locations for a total of 40,000 containers. The Jungheinrich Warehouse Management System (WMS) controls not only the automated system, but also all processes in the manual warehouse areas in dialogue with Liebherr's ERP system.

## STATE-OF-THE-ART TECHNOLOGY FOR LIEBHERR.

The system solution for the Liebherr plant in Echingen comprises high-bay and small parts racking systems, the latest materials handling equipment for containers and pallets – including control and visualisation – as well as six stacker cranes for pallets. With two load handling attachments each, these accelerate the storage and removal of Liebherr spare parts and ensure problem-free operation around the clock in the comprehensively automated processes.

## AI CONTROL AND MANAGEMENT.

The Jungheinrich Warehouse Management System (WMS) optimises the material flow at Liebherr with the help of artificial intelligence (AI). It controls and manages the entire semi-automated warehouse. It simultaneously implements a large number of

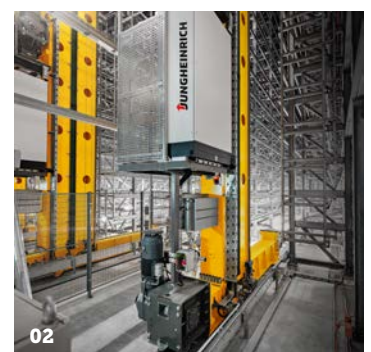
customer-specific functions. This achieves the goal of intelligent, comprehensive management of all complex warehouse areas, including integrated warehouse technology. This also includes, for example, the pre-picking of containers in multi-order mode and subsequent consolidation in the course of pallet picking. In addition, pick-and-pack picking into shipping cartons takes place several workstations. The goal: the greatest efficiency with maximum transparency for all intralogistical tasks at Liebherr's centralised spare parts supply in Echingen.

## Already equipped for future growth.

Jungheinrich's solution offered planning, project management and construction of the facility from a single source. Robert Schäd, Jungheinrich Sales Project Manager, also emphasises that the logistics solution for Liebherr is characterised primarily by its high degree of flexibility. It can be easily expanded and is therefore already equipped for future growth.

**01**  
The 2-aisle shuttle compact storage system provides 40,000 container storage locations.

**02**  
Six stacker cranes for pallets speed up storage and removal at heights up to 30 metres.



## THE PROJECT AT A GLANCE



Customer:

Liebherr-Werke Ehingen GmbH

Industry:

Mobile cranes

Company size:

> 5,000 employees

Location:

> 50 countries

## CHALLENGE

High level of throughput with maximum utilisation of space.

## JUNGHEINRICH SOLUTION

30-metre-tall and 6-aisle pallet high-bay warehouse in silo design, plus a 2-aisle, triple-depth small parts shuttle warehouse. The warehouse areas and processes are controlled and managed by the Jungheinrich WMS.

## RESULTS

18,000 storage locations plus 40,000 container storage locations with state-of-the-art conveyor systems, including intelligent control and visualisation.

## IMPRESSIONS



The Jungheinrich WMS enables intelligent process and material flow optimisation while in operation.

