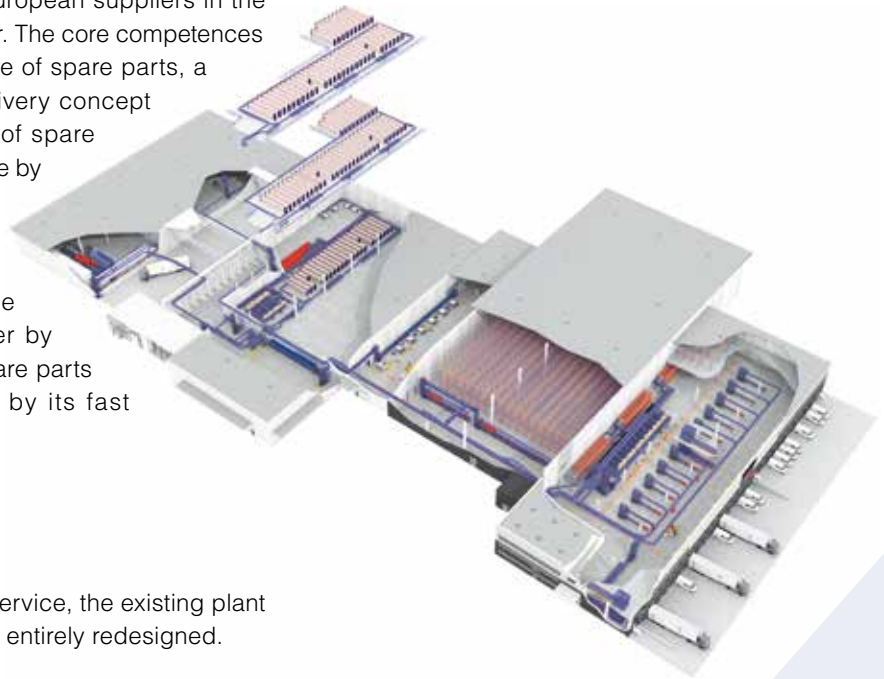


**Industry reference**  
**Spare parts supplier –**  
**Commercial vehicles**



**The Customer**

Winkler is one of the leading European suppliers in the commercial vehicles parts sector. The core competences comprise an extensive full range of spare parts, a sophisticated logistics and delivery concept guaranteeing the fast delivery of spare parts as well as competent advice by 250 professional specialist advisers. The subsidiary Winkler Logistik in Ulm ensures the supply of spare parts to the European customers of Winkler by stocking more than 100,000 spare parts for commercial vehicles and by its fast delivery service.



**The Requirements**

In order to offer an even faster service, the existing plant not only had to be extended but entirely redesigned.



**winkler**  
**Das passt.**

**Klinkhammer Intralogistics GmbH**

Wiesbadener Straße 11 · 90427 Nuremberg · Germany  
Phone +49 911 930 64 0 · Fax +49 911 930 64 50  
info@klinkhammer.com · www.klinkhammer.com





Pallet order picking warehouse with container conveyor connection

### **The Solution**

On the second level of the existing warehouse, 9 stations for small parts and pallet order picking were put into operation. Thus, the incoming goods and shipping areas could be separated locally. A special circulating lifter connects the different levels, distributes the containers from the incoming goods area to the intended warehouse levels and the containers with completed orders from order picking to the shipping area. A second i-point was integrated on the first level to split urgent orders and thus process them quickly and reliably. Thereby, the throughput time was reduced by a good 25 %.

In the course of several extensions, additional halls were expanded. By connecting the pallet order picking warehouse to the container conveyor technology, an integrated automatic transport system between the existing logistics system and the redesigned incoming goods and shipping areas could be realized. A 3-aisle automatic order consolidation buffer with a high-performance multi-level shuttle system supplies the packing area and 10 goods-out conveyor lines via container conveyor technology. 9 order picking stations are available for small parts in 18 lift storage areas. An automatic replenishment buffer ensures the supply of the lift storage areas.

### **Advantages for the Customer**

- Increase of container throughput from 400 to 2,000 containers per hour
- Separation of material flows (replenishment and order picking)
- Increase of throughput speed by 50 % thanks to the circulating lifter solution of Klinkhammer (creation of bypasses)
- Splitting of orders and faster processing due to a second i-point
- Direct feed-out of shop ware in close proximity to the pick-up station
- Shortened processing times

### **Data and Facts**

- 4.3 km of container conveyor technology connect all storage areas
- 28 order picking stations
- 8 incoming goods work stations
- Order consolidation buffer with multi-level shuttle (1,100 container storage areas)
- 18 lift storage areas with 9 order picking stations and automatic replenishment buffer
- Packing area with 20 packing stations
- Material flow control: interface to SAP R2

18 lift storage areas with 9 order picking stations and automatic replenishment buffer



Incoming goods area



Shipping area with modular belt frame lift

