kardexremstar

Storage
Order Picking
Handling & Automation

Case Study 022

Automotive

COMPACT STORAGE OF COMPONENTS

The Customer

Liebherr is one of the world's leading manufacturers of construction machinery. The company manufactures cranes, earth-moving equipment for the mining industry and household appliances. In Ettlingen near Karlsruhe in Germany, Liebherr undertakes complete overhauls of drive components for construction machines, mobile cranes, maritime cranes and machinery used in the mining industry. In addition to the manufacture of so-called ReMan and ReBuilt components Liebherr in Ettlingen also offers also complete overhauls and upgrades.

Further Information:
www.kardex-remstar.com

1 Task definition

In Ettlingen, Liebherr was faced with the challenge of finding a space-saving solution for the storage of numerous different spare parts that are used when overhauling drive components and, at the same time, enable on time processing of order-related picking sequences. The available storage space in the existing high-bay racking systems was to be used for large-size parts only. Liebherr also wanted to have the possibility of increasing its storage capacities at short notice and so create more space for production purposes. And to achieve this goal without having to take on additional staff, there was another demand on the storage system: to allow for substantially reduced picking times.

2 Solution

For the storage of the motor components, Liebherr in Ettlingen decided to purchase eight vertical lift modules with a height of almost 10 meters. A warehouse with a storage space of 1,185 m² then developed on a footprint of only 68 m². Apart from small parts such as screws, bolts, washers and seals, there was a tendency to store also heavy parts with a weight of up to 15 kg per part. This way, the existing high-bay racking system was relieved by as much as 30 %, and 35 % additional space was created for production purposes. All picking orders are created in the customer's ERP system and then communicated via Java Machine Interface (JMIF). Scanning the barcode on the labels triggers off tray movement inside the respective Shuttle systems. An LED pointer guides the operator to the positions from which the items are to be picked. After removing the goods from the trays, the picking process is confirmed by scanning the labels of the outgoing goods. With this solution, picking times are reduced by up to 30 % which means substantial cost savings, and stock levels are recorded directly and very accurately.

3 Process description

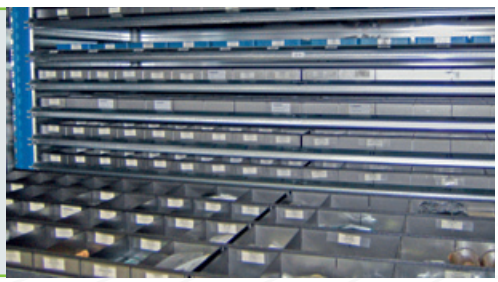
We would be delighted to explain the different processes in detail in a personal consultation.

4 Advantages at a glance

- High-density storage: 1,185 m² storage space on a footprint of only 68 m²
- Shorter routes and faster picking operations
- Time-saving and user-friendly picking processes through use of laser pointers
- Accurate recordings and reliable stock control/ protection of stored goods

5 Scope of delivery

- 8 x Kardex Shuttle XP (W x D x H: 2,450 x 864 x 9,450 mm)
- 560 carriers, each with a useable load of 490 kg
- Storage space: 1,185 m²
- Each unit equipped with 1 confirmation bar
- Each unit equipped with 1 LED pointer
- Java MIF integration



Further Information:
www.kardex-remstar.com