## Branch Reference

Home Textiles

The Customer

Marburg wallcoverings is a highly performing, mid-sized company. Wallpapers manufactured by Marburg wallcoverings reach customers in more than 80 countries all over the world. The full-line supplier offers quality wallpapers for all requirements, luxury wall coverings for an exclusive atmosphere, design objects made by artists like Ulf Moritz, Luigi Colani or Karim Rashid and technical wall coverings for industrial buildings and hotels.
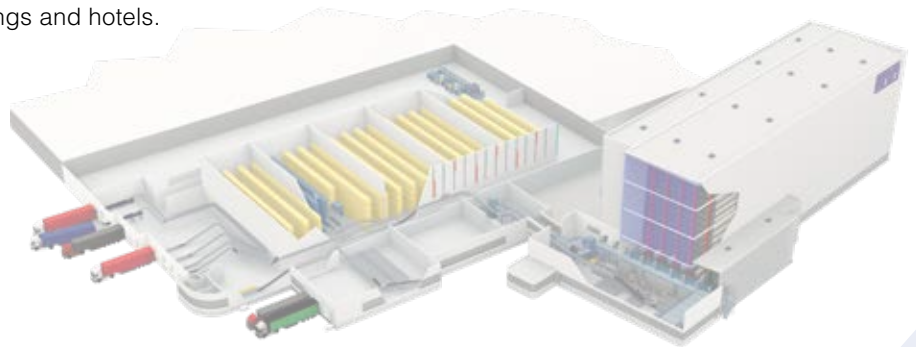
The Requirements

The product range of Marburg wallcoverings comprises more than 4,000 different wall coverings. While formerly large quantities were ordered and stored by the retailers in their stores, nowadays highly flexible and customized orders are in demand. The logistic concept used so far was not able to cope with the trend toward smaller order quantities and shorter cycles.

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Overview of the logistics center

The Solution

The responsible managers at Marburg wallcoverings opted for a fully-automated solution for both the high-bay warehouse and the small parts storage section. The pallets with the goods packed in cardboard boxes leave the production area and are then transported directly to the high-bay warehouse via a conveyor bridge. Once arrived, the goods are distributed homogeneously and stored in the warehouse fully automatically. The dual load handling devices with parallel replenishment unit guarantees maximum efficiency. When distributing the goods over the warehouse, criteria such as sales frequency or production sequence play a vital role. This data is stored in the program of the Klinkhammer warehouse management system. The logistics center at the front of the newly built high-bay warehouse is the key element of this logistic solution. Here, 12 order picking stations have been built for picking goods from cardboard boxes. At each work station the necessary picking information are provided by displays. Thanks to the cardboard boxes being clearly labelled right from the start traceability on all levels is no problem. Once delivery is ready for shipment, conveyors ensure transporting the orders to the labelling station and finally to the dispatch area. The labelling system has been certified for all large shipping companies such as Deutsche Post or UPS.Small orders, supplier samples, brochures or promotional products are retrieved from the adjacent automatic small-parts warehouse – featuring 15,360 tote storage locations – and then directed to the "picking workplaces for small quantities".

At these workstations products are repacked and automatically transported on to the next station. Deliveries containing complete orders are conveyed automatically to the i-point where they are transported by forklift trucks to the shipping zone.

Advantages for the Customer

The fully automated solution in all zones of the warehouse increases transparency of the goods movements in the warehouse, minimizes throughput times and cuts down the time from receiving the order to goods shipment. The warehouse management software of Klinkhammer thereby provides a permanent and continuous overview of all logistic flows and access on all levels.

Data and Facts

Pallet high-bay warehouse: 22,884 storage locations
Automatic small-parts store: 15,360 containers à 600 x 400 mm
Conveyors: Pallet conveyors: 7 pallet stacker cranes with double load handling device, around 300 m of conveyors (incl. 2 lifts, 1 crossways transfer car)
Tote conveyors: 3 tote stacker cranes, around 1000m of conveyors
Material flow control (MFC) / warehouse management system (WMS):
Performance data: 12 power order picking stations: 150 pos./h, 500 full cardboard boxes/h • 6 small-parts picking stations: 120 pos./h, 450 wallpaper rolls/h, 1 returned goods workstation • Shipping area: 20 full pallets/h and 620 individual cardboard boxes/h

12 power order picking stations

Retrieval and repacking station for small quantities

Automated small parts warehouse