swisslog



FLEXIBLE SOLUTION FOR OMNICHANNEL LOGISTICS

CUSTOMER AND REQUIREMENTS

Supplying drug store chains and grocery stores with shampoo, hair care products and styling mousse is usually pretty straightforward. But sources of products used by professional stylists, or trendy products from smaller insider brands, are few and far between. Among these exclusive suppliers is HAGEL, a lifestyle company based in Hamburg, Germany. What began as a single hair salon 19 years ago has become a company known well beyond the gates of Hamburg. HAGEL now has 15 hair salons with retail space throughout the metropolitan Hamburg area and a major outlet store in Allermöhe. For the last 15 years, HAGEL has also operated an online store for premium hair care and styling products sold exclusively through

"Opening an online store was more or less a spontaneous idea," says HAGEL CEO Michael Heß, the brains behind the successful business idea. With 500 brands and over 30,000

different hair care and beauty products, HAGEL is now one of the leading European omnichannel suppliers in this market.

In 2016, Heß decided to join forces with Swisslog to take the leap into modern logistics. "Because of our company's growth, we faced a major challenge: finding a future-proof solution for our in-house logistics," explains the Hamburg entrepreneur. The previous logistics center located in the south end of Hamburg could barely keep pace with the growth in throughput, pro-duct range, and order intake. In the months before the company was able to move into a significantly larger logistics facility, HAGEL logistics managers were forced to store some of the product lines in tents. "Just storing and picking took a lot of time and legwork, considering how many different SKUs we have," recalls Heß. The problems with the manual logistics structures grew worse as the long picking distances and ever higher throughput led to avoidable picking errors. To Heß, it was blatantly obvious that the manual logistics structures simply would not be able to handle the varying order sizes from

online and offline sales over the long term.

While in search of a new logistics location, the HAGEL CEO found what he believed was a suitable automation solution from Swisslog. "Our goals were clearly defined from the outset. On the one hand, we needed to reduce the high personnel requirement and expenses in picking," explains Heß. "On the other hand, we needed a flexible concept that would not result in capacity bottlenecks even when implementing future expansion plans. We were determined to find an innovative logistics structure that could best handle the varying order quantities resulting from POS, outlet store and online store purchases."

Today, the Swisslog CarryPick logistics solution perfectly meets those predefined requirements. It enables targeted handling of the entire range of products – from hair brushes, shampoos and lotions to razor blades and perfumes – and it ensures that the orders from the different sales channels can be processed efficiently and without error. "Thanks to Swisslog and the relatively short 6-month time frame from order placement to go-live



In its Hamburg distribution center, HAGEL GmbH stores up to 190,000 items

of our new CarryPick system, we were able to relocate our intralogistics and get it up and running again without any major difficulties," states Heß.

THE SOLUTION

The new CarryPick warehouse of HAGEL GmbH is perfectly designed for the company's expanding brick-and-mortar and online business because it consists of three expandable modules: mobile racks, automated guided vehicles and multifunctional workstations for picking and packing the items removed from the racks. At the heart of the storage and picking system are the CarryPick vehicles. They travel under the loaded racks, lift them and, following the goods-to-person principle, transport them to the workstations using the fastest route. Thanks to this scalable and modular design, the system used by HAGEL

logistics can be adapted at any time to a new range of products or shifting areas of focus between online and brick-and-mortar commerce.

FULLY AUTOMATED STORAGE AND PICKING WITH **CARRYPICK**

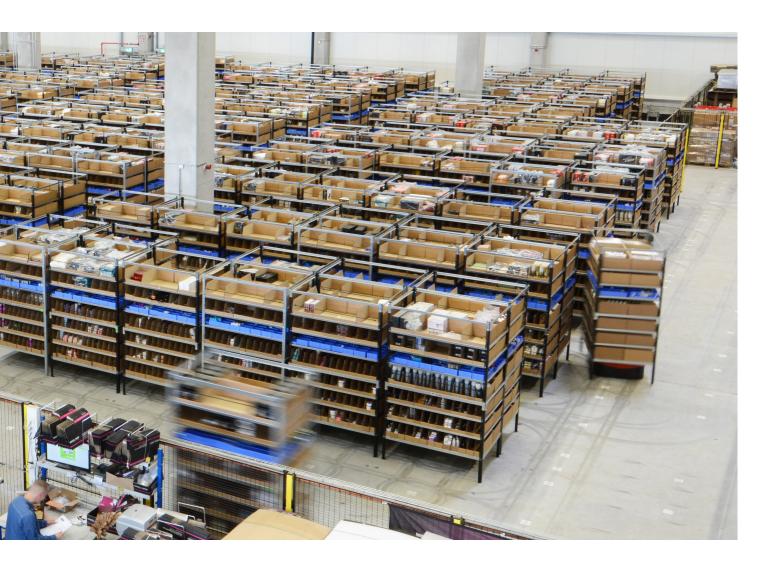
In HAGEL's omnichannel warehouse, a total of 28 mobile robots handle all open transport orders. The growing lifestyle company also entered into a leasing arrangement with Swisslog for four additional transport vehicles to cover the busy Christmas season. During the less busy months from March to October, HAGEL's automated CarryPick warehouse operates two shifts a day. During the peak months from November to February, the warehouse runs at full capacity.

The Swisslog SynQ software platform makes sure that the ordered items are transported as quickly as possible from the warehouse (average inventory: 190,000 items) to the picking workstations. SynQ automatically positions fast-moving A items closer to the workstations, while slower moving B and C items are stored in the center or the back of the warehouse. The warehouse management and control software also performs a continuous physical inventory to ensure delivery reliability for all the sales channels.

Unlike the original HAGEL warehouse, the CarryPick system supports parallel processing of a total of 20 open order requests. In the first step, items are removed in summarized order lines. In the second step, the picked items are assigned to individual order requests.

In the warehouse of the Hamburg omnichannel supplier, strict separation of picking and packing ensures controlled order fulfillment. Employees at the four state-ofthe-art workstations facing the rack units

CASE STUDY | HAGEL GMBH DESIGN | DEVELOP | DELIVER



concentrate on picking and placing the correct items.

Once an order is assembled, a second employee at the rear of the workstation packs the carton and includes the required shipping documents. The division of labor

between picking and packing enables a picking performance of approximately 600 picks per hour in the HAGEL warehouse.

"Thanks to CarryPick, our delivery time today is less than 24 hours. That allows us to offer next-day delivery."

> Michael Hess CEO of HAGEL GmbH



Ergonomic workstations promote error-free operation

DESIGN | DEVELOP | DELIVER



The CarryPick system supports product storage in cartons, bins, or as single items

FACTS AND FIGURES AT A GLANCE

Storage and material flow

Number of vehicles in the system	28 + 4 rental vehicles to cover peaks
Number of mobile racks	400
Number of workstations	5
Number of SKUs in the system	approx. 25,000

Hagel GmbH system and performance data

Number of product units	approx. 190,000
Avg. number of order lines/day	approx. 6,650
Avg. number of replenishment lines/day	approx. 11,000
Avg. number of replenishment lines/day	approx. 860
Max. number of replenishment lines/day	approx. 1,800
Throughput time per order	1 - 2 days
Storage space	approx. 800 m ²
Pick performance per workstation	530 picks/hour

BENEFITS

- Structured process from goods receipt and storage to picking, packing and shipping
- Separate storage and retrieval process
- Separate pick and pack process to ensure efficient picking
- Parallel picking of retail store orders (many items per order) and online orders (few items per order)
- Parallel processing of up to 20 open orders
- CarryPick is easily scalable and offers the highest level of redundancy

