

PRESS RELEASE

Automatic long items and small parts storage for aluminum profile systems

heroal's new high-bay warehouse has the capacity for 10,000 long items and 7,000 euro pallets. A centrally controlled intralogistics system from Vollert ensures a smooth material flow between infeed and outfeed.

heroal produces more than 60 million meters of powder-coated aluminum windows, doors and facade profiles every year. In addition to profile systems for roller shutters, roller doors, shadings and photovoltaics. In order to manage the large quantities efficiently and to supply the more than 3,000 customers worldwide in a timely manner, heroal invested in a completely new logistics center at the German site of Hövelhof near Paderborn. On a total area of 60,000 m² there is a high-bay warehouse with eight aisles for long items and three alleys for small parts, as well as a warehouse with 20,000 m² space. The integration of the eleven storage and retrieval machines into the infeed, and the picking with the outfeed was carried out by the heavy lift experts from Vollert in March 2010. After all, the transport carriers weigh up to 2.3 tons.

Heavy load technology on quiet soles

From the infeed to the outfeed, the internal transport is fully automatic. Only the picking of the customers' orders is carried out manually, long items and small parts separately. Large quantities are picked using a bypass solution. Due to the fact that the workers' workplaces are located in the immediate vicinity of the conveyor system, especially low-noise Vulkollan hard rubber tires are used instead of steel wheels. Low wear is ensured by extremely wide cross-sections. The to and from transport of the profile carriers, with the up to 7.2 m long aluminum profiles, is distributed over two levels. Infeed and outfeed is carried out on the ground floor, while storage and return of empty transport carriers are at a height of 4 m. An automatic crane in front of the high-bay warehouse serves eight storage trolleys on a 60-meter-long crane track to the rack-storage equipment of the long-item storage facility. Sensors measure the length and height of the carriers. The control system then automatically selects the appropriate storage location. An automatic weight, height and clearance control of the pallet boxes and euro pallets, which are transported by roller and chain conveyors and use the same conveyor technology, is also used in the small parts storage. In order to prevent downtime, two lifters lower the pallets for relocation to rail-mounted distribution cars, which distribute them to four picking stations.

25.000 carriers in circulation

The transport carriers of heroyal are a special feature. "For many years these have been circulating with customers and suppliers - a total of around 25,000 pieces - and some have been damaged by manual stacker operations", explains project manager Dieter Schäfer from Vollert. "Nevertheless, we wanted to keep the carriers for cost reasons". All systems were adapted to the existing system. In addition, a tolerance measurement was carried out in a full carrier lifter at the time of delivery. Badly damaged carriers are disposed of. This ensures trouble-free operations in the warehouse. "As our logistics center takes over the entire customer supply, the timely completion and a smooth warehouse change were very important for us," emphasizes Ralf Meermeier, Technical Director at heroyal. For this, the warehouse had to be completely filled weeks before. "But Vollert's colleagues have done a good job - despite the short realization time. "We were able to start with the new warehouse without any delays at the turn of the year and since then we have been supplying the entire world from Hövelhof".

About Vollert Anlagenbau GmbH

As specialists for heavy loads and large parts, Vollert Anlagenbau GmbH develops turnkey intralogistic concepts for the aluminum and metal industry. As a general contractor and full-service provider, the service range encompasses state-of-the-art material flow, storage and packaging technology as a stand-alone solution or integrated into a larger logistics environment.

Whether fully automated mega-high bay systems for aluminum coils, intelligent material flow systems for the leading aluminum extrusion press manufacturers, the world's most efficient storage and retrieval machines for the storage of sheet metal plates, automatic crane systems for 50 tons and more or the most modern surface coating systems – Vollert is everywhere.

Vollert's plant and machine solutions are used in more than 80 countries worldwide. Its subsidiaries in Asia and South America also strengthen the sales activities. Vollert employs 250 people at its company headquarters in Weinsberg. www.vollert.de

Press contact

Frank Brost

Senior Marketing Manager

Vollert Anlagenbau GmbH
Stadtseestr. 12
74189 Weinsberg/Germany
Phone: +49 7134 52 355
Fax: +49 7134 52 203
E-mail: frank.brost@vollert.de



Image 1

10,000 long items and 7,000 euro pallets will be located in heroyal's new logistics center. Inside, the automatic, heavy-lift conveyor technology from Vollert Anlagenbau interconnects the infeed, the high-bay warehouse, the picking and the outfeed.



Image 2

After delivery to heroyal's new logistics center, Vollert's full carrier lifter takes the up to 2.3 ton heavy and 7.2 m long transport carriers with aluminum profiles and lifts them to the 4 m high transport level. Before this the carriers are automatically weighed and checked for deformation.



Image 3

An automatic crane on a 60 m long crane track takes over the distribution to the eight aisles of the long item high-bay warehouse. Depending on the height and length of the carriers, the control system automatically selects the appropriate storage location.



Image 4

The roller and chain conveyors in heroyal's small parts store are designed for transporting pallet boxes and euro pallets up to a weight of 2 tons.



Image 5

For order picking the boxes and pallets are removed from the high-bay and lowered by two Vollert lifts to the picking stations.