



# Hase Safety Group STILL takes warehouse automation to a new level

Automated industrial trucks come into their own wherever recurring transport tasks with standardised transfer stations and homogeneous load carriers are required. A high degree of flexibility is ensured by scaling with additional trucks, different automation levels and adjustable routes. One excellent example of this is the expansion of Hase Safety Group's automated warehouse, which uses high-performance automated trucks from STILL. Route optimisations and automation of incoming goods checks are also used to help improve performance.

With the market for work safety clothes rapidly expanding, there is also a need for more warehouse capacity. Hase Safety has made its warehouse fit for the future by expanding the capacity to 10,000 pallet locations and introducing automation technology from STILL.

**Sector:** Leading German manufacturer of high-quality work safety products.

**Challenge:** Expansion of storage capacity and efficient and economical warehousing.

**Solution:** Analysis and optimisation of the processes and routes in incoming goods. Use of automated trucks incl. three MX-X iGo systems Very Narrow Aisle Trucks and four EXV-SF iGo systems high lift pallet trucks.

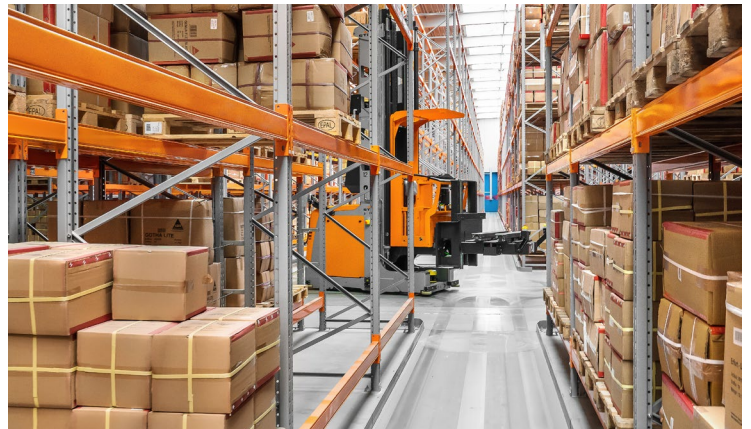
## Growth trajectory at Hase Safety

Over the course of its 80-year history, Hase Safety Group AG, based in the town of Jever in north-western Germany, has focused on the manufacture of work safety clothes. To this day, the company still has its sights firmly set on growth. In line with this, the company recently decided to expand its premises. The new building will house logistics areas, an innovation centre for client training, product development and a showroom.

Theodor Wagner, President of Hase Safety Group AG explains: "This is the only way we could meet the growing demand for new products. Greater turnover of goods for our customers throughout Europe also requires more warehouse capacity, plus efficient and economical warehousing."

## More automation means more productivity

For short journeys, the various items are packed in boxes and, following ABC analysis, stored on pallets according to type in the narrow aisle warehouse. All AGV's (Automated Guided Vehicles) navigate using rotating laser scanners, which con-



**"Greater turnover of goods for our customers throughout Europe also requires greater warehouse capacity, plus efficient and economical warehousing."**

Theodor Wagner, President of Hase Safety Group AG

stantly measure distances to installed reflectors, enabling them to move safely and autonomously. Three MX-X iGo systems Very Narrow Aisle Trucks and four EXV-SF iGo systems high lift pallet trucks from the latest generation were each fitted with the iGo systems automation kit from STILL. Standardised components, controllers and interfaces turn the forklift trucks into high-performance AGVs.

The extension to the hall is also home to a development centre.



**"We have worked with STILL to automate many of the processes in incoming goods. Both the new AGVs and the newly programmed route optimisations also help to improve performance."**

Maximilian Engels, Project and IT Manager from Hase Safety



In incoming goods, the boxes with new items are collected from shipping containers via telescopic conveyor belt. Logistics employees then put the boxes on pallets using vacuum lifting aids separated according to type and send these to the incoming goods positions. Manual scanning of the storage locations and the items triggers the IT system to perform storage tasks automatically. Project and IT Manager at Hase Safety, Maximilian Engels, explains further: "We have worked with STILL to automate many of the processes in incoming goods. As well as the new AGV, the newly programmed route optimisations also help to improve performance."

With automatic storage, EXV iGo systems high lift pallet trucks collect the pallets of separated materials in incoming goods and take them to the contour check. If they pass, they are transported by the EXV to the narrow aisle warehouse where they are then stored in the assigned storage locations by MX-X iGo systems turret trucks. If goods are being retrieved, the process works in reverse with the MX-X transporting the relevant pallet to the transfer point. This, in turn, is then collected by the EXV and either transported to the delivery shelf of the manual order picking warehouse or directly to the HGV's shipping points. Once the storage/retrieval jobs are completed, the AGVs return automatically to their waiting positions for the next job.



At Hase, the MX-X iGo systems with telescopic platforms travel in narrower aisles than MX-Xs with swivel traverse forks. This directly leads to more storage capacity in the narrow aisle warehouse.

"One consequence of the route optimisations is that fewer transport jobs are required, which means the AGVs don't need to move around as much. This has also significantly improved safety in the warehouse. Despite the coronavirus pandemic, and thanks to the close collaboration between our team and the project managers at STILL, we were able to successfully reorganise the software and hardware for our automated warehouse. As a result, we are now extremely well equipped to deal with all future challenges," summarises Engels.

### **Service directly on site**

STILL has built a wide network of service technicians throughout Germany and abroad over the years. If a forklift truck develops a fault or maintenance is required, a service technician is always available to attend on site in no time. Sales adviser for intralogistics systems and project manager from STILL's Bremen subsidiary, Lars Lemke, expands on this point: "When we sell trucks, our customers always have easy access to service technicians who are specially trained in our automated products. Stefan Schuster is one example of this, having provided consistent support for Hase Safety's automated warehouse right from the start. In doing so, he has gained further knowledge of the various expansion stages."



**"When we sell trucks, our customers always have service technicians close by."**

**Lars Lemke, project manager and advisor for intralogistics systems, STILL subsidiary Bremen**



If a transport job is triggered, the EXV iGo systems leave the floor contact charging station, without the need to disconnect any charging cables.

## Autonomous charging of truck batteries

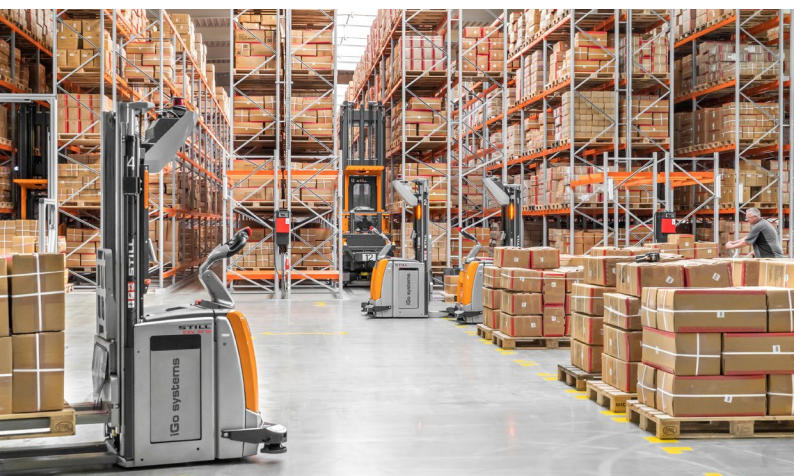
The modern photovoltaics system, which covers an area of more than 10,000 m<sup>2</sup>, supplies green energy for charging forklift truck batteries. "The AGVs drive autonomously to their charging stations to charge their batteries. There is no need to connect a cable and the trucks are charged through floor contact alone. This is another plus point, as the AGVs can now charge their own batteries overnight without any additional personnel required," says Lemke.

## One-shift operation still possible

The shipping containers from Bremerhaven are not only delivered all day, but also at night. Theodor Wagner explains: "By reorganising our automated warehouse, we can now store goods during the evening and overnight without personnel being present. This is a key requirement for the new processes. Despite the increasing demand on the market for work safety clothing, the new system allows us to continue with our one-shift operation."

## Narrower aisles for MX-X iGo systems with telescopic forks provide greater storage density and more capacity

All MX-X's are fitted with telescopic forks in comparison to turret trucks with swivel traverse forks, meaning the aisles at Hase Safety can be significantly narrower. The storage density and capacity are both higher as a result.





From left to right: Hase Project Coordinator Maximilian Engels, STILL Project Manager Lars Lemke, Managing Director Robert Daratha, Founder and President Theodor Wagner.

## Maximum flexibility in the scalable automated warehouse

Thanks to the scalability of the automated warehouse, additional AGVs can be introduced quickly and flexibly to deal with increased capacity requirements. The fact that the AGVs can be operated by hand for certain warehouse processes underlines just how flexible Hase Safety's warehouse is.

## Summary

The modern distribution centre with the iGo systems automated warehouse from STILL is ideally equipped for future requirements. Thanks to the system, the preferences and requirements of major customers can be met and the products delivered throughout Europe promptly and on schedule. "For over 30 years, we have been relying on STILL as a partner that can quickly turn our ideas into a reality. We started automating our logistics systems as early as 2010. In recent years, we have been constantly expanding our automated warehouse and this most recent project has brought it in line with the state of the art. With STILL's long history of automation experience and expertise, not only in planning and design, but also with the final implementation of the solution, they have always provided us with the best possible support," summarises a satisfied Theodor Wagner.

**And action!** Automated solution at the Hase Safety Group in use. Click to start the movie:



STILL GmbH  
Berzeliusstraße 10  
22113 Hamburg, Germany  
Phone: +49 (0)40 7339 2000  
Fax: +49 (0)40 7339 2001  
info@still.de  
[www.still.de](http://www.still.de)