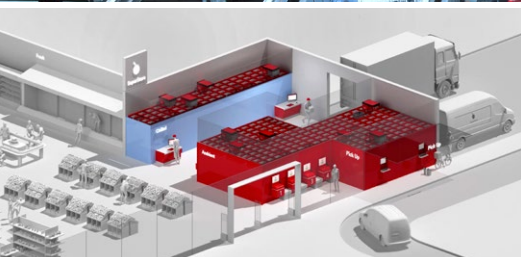


# Dynamic Driven – Robotic Solutions

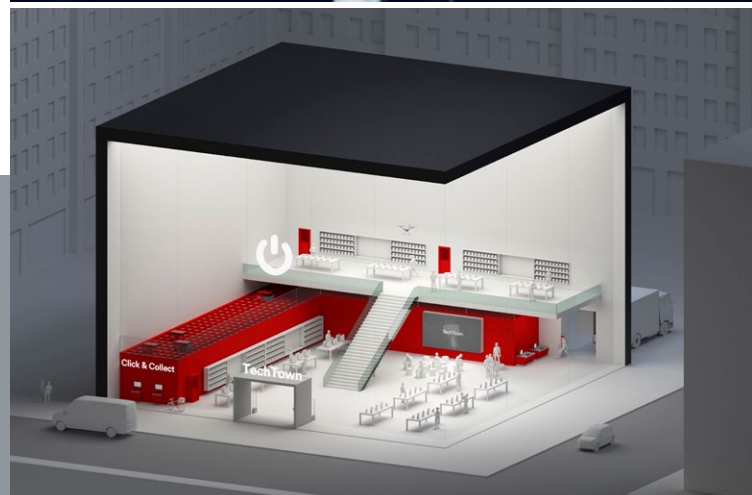


# Robotic Solutions

High productivity, low operating costs and simple commissioning – along with our efficient partners, we implement innovative robotic solutions that can be commissioned as stand-alone systems or together with other storage and order picking systems..

Needs-based scalability, rapid expansion and maximum dynamics make our robotic applications the ideal solution for growing markets. Whether in micro-fulfillment centers close to the city or central e-commerce distribution warehouses, smart storage systems and robots can streamline logistics processes and save on costs. For both new construction and retrofit projects, we can offer advice on your needs and guarantee highly professional completed works as general contractor.

From dynamic cube storage small parts warehouses like AutoStore to intelligent pick robot arms or CAJA and moving racks – we automate and rationalize your intralogistics.



## Same Day Fulfillment Close to the Customer – Custom Systems for E-Commerce

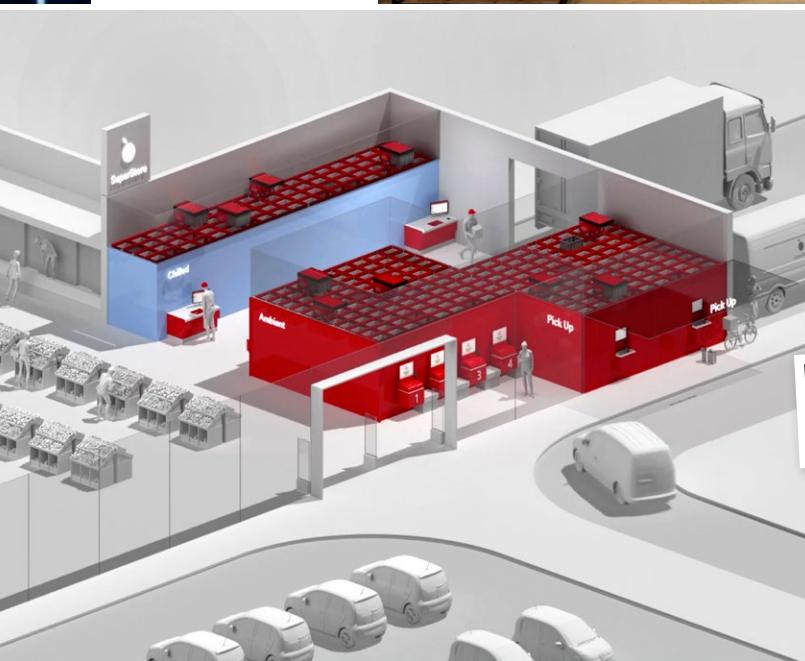
Micro-fulfillment is an innovative strategy for efficient order fulfillment of orders in on-line retail in close proximity to the end customer. In this way, orders can be picked on the same day and made available to the customer for collection or delivered directly to their home. Thanks to the high level of automation and high storage density, these systems need little space and low staff numbers. When close to customer, Click & Collect offers can be enabled, with significant reductions to delivery times and costs.

With AutoStore®, CAJA and other technologies, HÖRMANN Intralogistics offers innovative systems for automated storage and order picking in micro-fulfillment centers. Given its modular structure, AutoStore can be installed quickly and easily and custom expanded at any time. Ultra-high storage density and availability make AutoStore the ideal solution for micro-fulfillment centers. When it comes to order picking and collecting systems for groceries, HÖRMANN Intralogistics works with the experienced eGrocery service provider StrongPoint.

## The Next Level in Warehouse Automation – Robotic Driven Solutions

To optimize high throughput order picking stations, a large variety of items and 24/7 operation, with its partner Robominds HÖRMANN Intralogistics offers clever, high-productivity AI-supported pick-by-robot solution. The robobrain® control is based on artificial intelligence and communicates directly with our HILIS Warehouse Management System. With a range of different flexible, rapid and precise gripping tools, robot arms can take over all order picking activities.

The overall system can be flexibly adapted for different sectors, from grocery to drugstore, fashion, electronics, medicine etc., and fits perfectly with AutoStore.

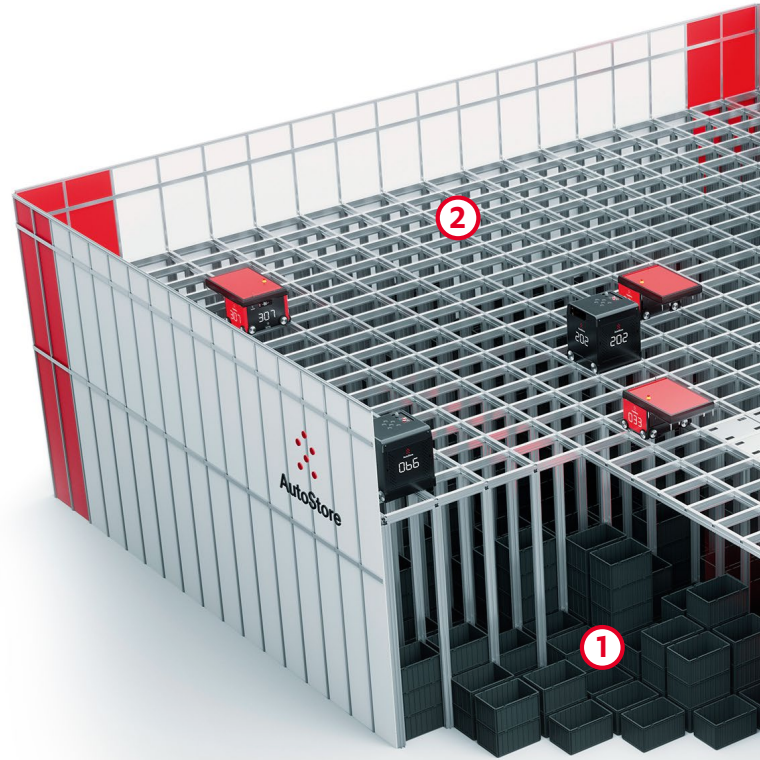


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# The Ultimate Space Maker

AutoStore® is a modern, innovative system for automated small parts storage and order picking from plastic bins, developed by the Norwegian company Jacob Hatteland Computer AS. The system concept came from the need to optimize volume utilization, dynamics, energy efficiency, expandability, use of materials and order picking station connections compared to conventional automatic small parts warehouses (AKL) or shuttle systems.

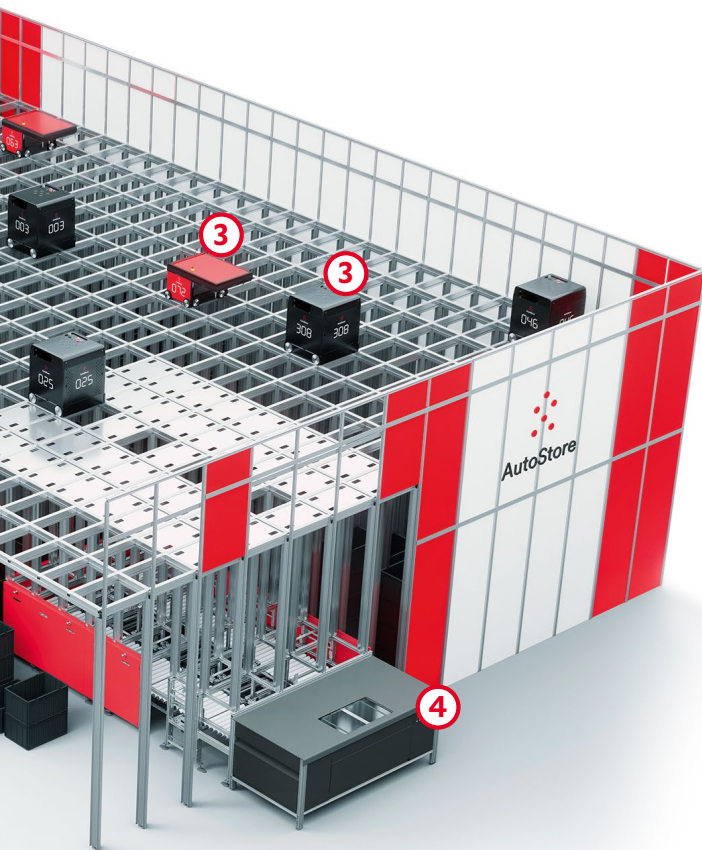
Being an official distributor, HÖRMANN Intralogistics offers AutoStore as general contractor with the custom-made HiLIS AS WMS, which can also map manual storage areas and additional processes. AutoStore can be installed as a stand-alone solution or integrated into an overall logistics concept. The HÖRMANN intralogistics team is available 24-hours a day, 365 days a year for customer service and maintenance.



“With our experience as a general contractor in various industries and the tailor-made warehouse management system HiLIS AS, we design and implement an individual, powerful and future-proof AutoStore solutions for you.”

ROBERT HEINZ | HEAD OF AUTOSTORE DEPARTMENT  
HÖRMANN LOGISTIK GMBH





### HiLIS Warehouse Management System

The AutoStore controller carries out the transport orders for all robots independently, but has no information on the contents of the bins. HÖRMANN Intralogistics developed the HiLIS AS superior warehouse management system specifically for this purpose, and it can also map manual storage areas and additional processes. It is tailored to AutoStore requirements and connected directly to the customer's HOST systems.

HiLIS AS makes the incoming goods and order picking information available at the ports, maps all operator functionalities and enables operator intervention.

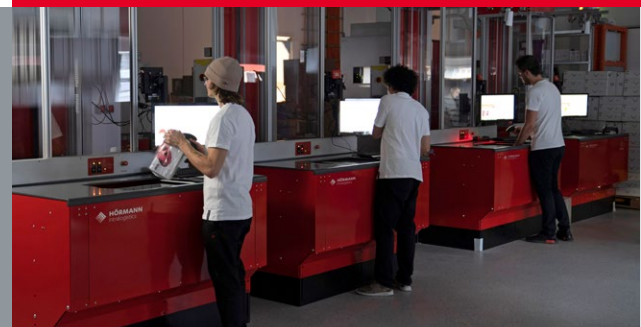
## The Advantages at a Glance

- ◆ High level volume utilization thanks to compact storage
- ◆ High dynamics
- ◆ Simple and flexible design options for integration into existing structures
- ◆ Modular overall system structure
- ◆ Best scalable with capacity increase by expanding the grid
- ◆ Best scalability in terms of increased performance through the use of additional robots and ports
- ◆ Low energy consumption thanks to low power consumption and maximum efficiency
- ◆ Maximum availability thanks to built-in system redundancy
- ◆ Best security against theft
- ◆ HiLIS AS Warehouse Management System by HÖRMANN Intralogistics



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- ① Bins stack
- ② Grid
- ③ Robot
- ④ Port for goods receipt and order picking





## Our Partners

At HÖRMANN Intralogistics, we work with consolidated partners to design resource-saving automation systems for your warehouse logistics processes. Especially over the last mile, robots can streamline processes and speed up delivery to the end customer. Find out more about our innovative robotic systems manufacturers.



 AutoStore

**CAJA**

 robominds

**SAFELOG**

 StrongPoint

# Pick-by-Robot



## robominds

Pick-by-Robot is an innovative way of freeing workers from repetitive order picking activities – reliably, quickly and without the fatigue. This pick-by-robot system offers logistics processes a cutting-edge alternative to manual order picking. With its patented robobrain® solution, our partner Robominds has created a modular process intelligence platform. The platform is based on Artificial Intelligence.

Smart software modules and modern hardware components form a unique system for customized pick-by-robot order picking – for example in addition to an AutoStore or CAJA robotic system.

## The Advantages at a Glance

- ◆ Reliable and fatigue-free
- ◆ 24/7 operation Low operating costs
- ◆ Maximum pick security
- ◆ High productivity
- ◆ Error-free order picking
- ◆ Simple commissioning and flexible integration into existing order picking stations
- ◆ Self-learning with AI
- ◆ Custom safety concept

For more information,  
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# Moving Racks

## SAFELOG

The ever-increasing number of items and ever-increasing demands for fast and efficient order picking pose new challenges for classic warehouse logistics. Working with SAFELOG, HÖRMANN Intralogistics has developed an innovative moving racks system for order picking process automation, even for bulky goods, based on the goods-to-person principle.

HÖRMANN Moving Racks can replace or supplement classic order picking areas characterized by high staff numbers and long walking distances, with an efficient, flexible system of mobile shelves (racks), presented to the picking staff in good time and precise sequence

The racks are transported from the storage areas to the order picking workstations (picking area) by mobile transport robots by the SAFELOG company. All of the system's order picking processes are intelligently controlled and monitored by the HÖRMANN Intralogistics System (HiLIS WMS), to guarantee maximum performance and prompt delivery. The swarm intelligence of the robots employed optimizes transport routes and maximizes redundancy.

HÖRMANN Moving Racks can be applied as a stand-alone solution or integrated into other storage and order picking systems, like AutoStore or CAJA. The HiLIS WMS synchronizes the processes in the individual systems to enable out-bound delivery of consolidated orders from different areas.



## The Advantages at a Glance

- ◆ Lower staff numbers and walking distance
- ◆ Flexible and expandable with more AGVs or shelves at any time
- ◆ The order picking area can be equipped with support systems, such as pick-by-light.
- ◆ In multi-order picking configuration, the HiLIS WMS offers further options for increasing picking efficiency through intelligent batch formation.



< For more information, visit our website

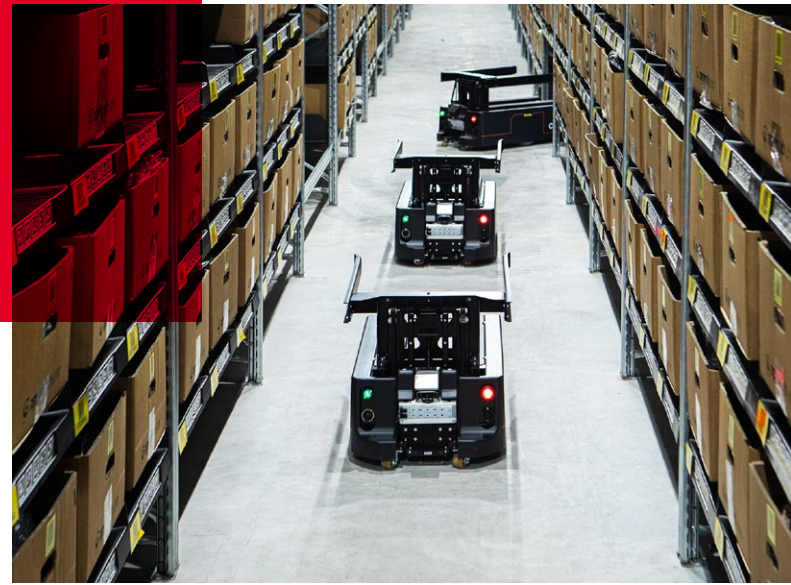


# CAJA Robotics

## CAJA

In fast-moving business sectors, automation solutions must be able to flexibly adapt their systems to the specific intralogistics processes and infrastructure. With our partner CAJA Robotics, we take an innovative approach with modern software, specially developed robots that deliver goods based on the goods-to-person principle, and user-friendly workstations.

The CAJA Robotics solutions are designed to meet the specific requirements of dynamic warehouse processes. One particular advantage is that the CAJA Robotics applications are very flexible and scalable, and have high throughput capacity. They are easy to install and adapt to the existing customer base, offering immediate benefits to any high-efficiency storage system. We work in close collaboration with you to develop a needs analysis, and implement your custom robotic system as general contractor.



## The Advantages at a Glance

- ◆ More efficient order picking
- ◆ Reduced or increased storage security
- ◆ Reduced staff numbers and walking distances
- ◆ AI-based robot and cloud software support, fully automated order processing
- ◆ Scalable, modular architecture that reacts to order peaks and troughs at lightning speed
- ◆ Flexible, adaptable rack structures for new business areas
- ◆ You can use your own bins
- ◆ Rapid commissioning



< For more information,  
visit our website

## Robust E-Commerce Solutions

**New build and extension of the AutoStore® small parts warehouse for the Innsbruck-based company SportOkay.com**

Specializing in alpine clothing and sports equipment, the e-commerce company Sport Okay GmbH offers over 200 top brands at its on-line shop [www.sportokay.com](http://www.sportokay.com). Tens of thousands of satisfied customers in Germany, Austria, Italy and 15 other countries are supplied by this sports specialists in the heart of the Alps.

Given the exceptionally positive development of its on-line shop, SportOkay.com has invested in a new logistics center in Innsbruck, where HÖRMANN Intralogistics operating as general contractor set up an AutoStore system as the central order picking system.

„With the new, expandable AutoStore small parts warehouse, the SportOkay logistics center is perfectly equipped for the future, thanks also to the personal and dedicated support from HÖRMANN Intralogistics.“

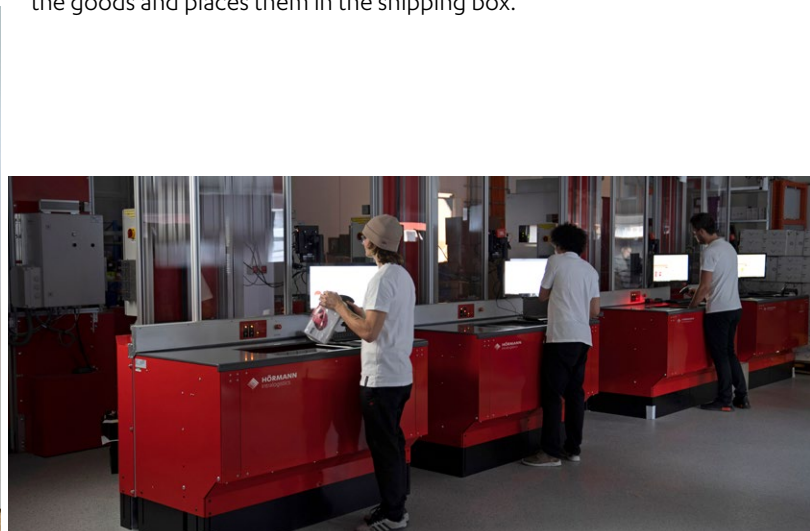
KONRAD PLANKENSTEINER | MANAGING DIRECTOR  
SPORT OKAY GMBH, ÖSTERREICH

### **Dynamic and flexible in the smallest of spaces**

The AutoStore warehouse was implemented on the second floor of a new building. The workplaces for incoming goods and order picking are located on the ground floor. For the custom design process of the SportOkay.com AutoStore system, HÖRMANN Intralogistics conducted a number of real-time simulations using original data.

Now at the final expansion stage, 44 robots with approx. 55,000 bins are operating over an area of 36.8 m x 79.2 m x 5.5 m (6.5 m) (L x W x H) serving items at 12 workstations with swing ports and connected bin lifts. Working 10 hours, the AutoStore system now carries out around 336 storage and return operations, and 8,000 picks per day.

The workplaces for storing, stock removal and picking the goods at SportOkay.com are located on the ground floor below the AutoStore system. The items are brought to the incoming goods workstations on pallets or in boxes, where they are unpacked and stored in the system. Goods for order picking are presented to one of the goods outbound workstations by the AutoStore system, the worker then removes the goods and places them in the shipping box.





### Large parts storage on moving racks

In the basement, large parts like skis, snowboards, sticks, etc. are kept on racks. Fixed slots are assigned to the racks and coded using floor-mounted RFID tags. This gives the rack area defined routes for the AGVs. Depending on the picking order, the mobile SAFELOG AGV L1 transport robots pick up the racks with the required items from the bin location. The AGV with the rack can be taken directly to the picking zone and the correct work station via a console lifter. The racks can be equipped with a range of cantilever arms or adjustable shelves. After picking, the racks are brought back to their slot by the AGV.

Orders already picked are also transported from the Auto-Store picking stations directly to the packaging machine by specially configured Type S2 SAFELOG AGVs.

Thanks to this goods-to-person principle, bin locations can be used efficiently, reducing walking distances for order picking staff by around 80%. This leads to considerable increases in picking quotas.



< For more information, visit our website



# There for You!



[www.hoermann-intralogistics.com](http://www.hoermann-intralogistics.com)

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