



# **Hänel Storage Systems**

## **Improving Inventory Accuracy with Automated Vertical Storage**

**Author David Phillips**

**Issue 08/2019**



# Improving Inventory Accuracy with Automated Vertical Storage



For many businesses, inventory control can be a constant source of pain. According to surveys, 34 % of companies miss shipping deadlines due to unavailability of stock, and 35 % find maintaining efficient warehouse processes to be especially challenging.<sup>(1)</sup> Finding ways to improve inventory accuracy is a massive component of a successful warehouse.

Inventory visibility and accuracy are two of the most difficult tasks to manage. The average rate of inventory accuracy across all businesses is only 63 %!<sup>(2)</sup> We're in desperate need of change. And, warehouses are turning to technology to create that change. A survey conducted by Motorola found that the majority of warehouses invested in new technology through 2018.<sup>(3)</sup> Unfortunately, over one-third of small to medium-sized businesses still rely on manual tracking methods and outdated warehouse technology.<sup>(4)</sup>

How do you invest in technology that will work for you? What kind of system can not only boost inventory accuracy, but also provide other benefits such as increasing floor space and productivity throughout a warehouse and business?

## What is Automated Vertical Storage?

Automated vertical storage is a **system that compresses storage space vertically, which helps improve accuracy by organizing and dispersing inventory to employees in a rapid and precise manner.**

All of those open shelves, bins and containers scattered throughout a warehouse are risk factors when it comes to inventory loss and pick accuracy. With automated vertical storage, you can store all of that product in one hyper-convenient vertical solution that automatically disperses inventory via a central access point. This means less time spent traversing shelves or multiple floors to find the correct product, and more time spent on picking and shipping.

Automated vertical storage's unique delivery system supplies each critical piece of inventory directly into a retrieval area at the correct ergonomic height – allowing you to improve workflows, reduce waste, and even realize a more harmonious warehouse infrastructure.

**Say goodbye to inventory loss, human error and chaotic stocking practices; Say hello to tech-assisted inventory delivery.**

## How does it work?

The exact storage method depends upon the technology.

The Hänel Rotomat® Vertical Carousel uses the “Ferris Wheel” principle to store and retrieve objects, and all items are stored in multifunctional containers. End each item is weighed, scanned, and stored in the system, and the provided display unit will allow you to select any products stored within the system for rapid retrieval.

The Hänel Lockomat®, a variant of the Rotomat®, uses a security-forward design to protect inventory behind compartment doors with restricted access.

The Hänel Lean-Lift® Vertical Lift Module stores inventory in two columns with an empty shaft between them. Items are

organized on pans, which are automatically measured for height and then placed in the ideal storage location. This eliminates wasted space between pans and maximizes space utilization within the lift. An “extractor” elevator brings entire pans directly to the user.

The process for retrieving items is somewhat similar for all models.

1. An employee selects the product they wish to pick from the display panel, either by text or by photo.
2. The automated vertical storage system will retrieve the inventory via an extractor (Lean-Lift®) or by rotation (Rotomat®).
3. A bin or pan containing the item will be delivered to the retrieval area, and depending upon the model, the correct product will be illuminated for easy picking.
4. The bin or pan can now be placed back into the unit, where it will be appropriately stored for the next pick.

**That's it!**

**But how will automated vertical storage systems help you improve accuracies?**

## **Improving Inventory Accuracy With Automated Vertical Storage**

As the number of U.S. warehouses continues to grow (up 6.8 % over the last five years<sup>(5)</sup>), finding ways to optimize inventory across your supply chain has become a critical driver of business profits. Almost half of all shoppers use both online and in-store shopping to order products, and this surge in multi-channel shopping puts a strain on warehouses.<sup>(6)</sup>

Businesses must be able to rapidly and accurately pick products and deliver them on a tight timeframe. In fact, 30 % of top supply chain managers say that improving response times and inventory accuracy is a top priority for their business.<sup>(7)</sup> Half of all companies say that technology is the key to unlocking the potential of their supply chain.<sup>(8)</sup>

Automated vertical storage is that technology. It increases speed-to-pick, reduces errors, improves workflows and streamlines day-to-day warehouse operations. There are several ways that automated vertical storage systems can strengthen your supply chain accuracy.

## **Eight Ways Hänel's Automated Vertical Storage Systems Can Help You Improve Warehouse Accuracies**

Hänel's automated vertical storage systems can help your warehouse stay lean, control inventory, and improve accuracy.

### **1. Improved Accountability:**

Some automated vertical storage systems, like the Hänel Lean-Lift® and Rotomat®, track each user's access and performance, which helps managers gain visibility on any potential issues. This also ensures that employees are held accountable for the accuracy and validity of their picks.

### **2. Mitigating Shortages and Overstock:**

By logging, identifying – and in some cases, imaging – each stored item, automated vertical storage systems can keep an accurate log of everything in stock. This gives you a top-down view of your inventory, and reduces instances of overstock or shortages.

### **3. Increased Picking Accuracy:**

With top-level warehouse management software, automated vertical storage systems can identify the correct part and retrieve it rapidly, delivering it to a convenient, ergonomic access point.

### **4. Tech-assisted Picking:**

Certain automated vertical storage systems provide additional technology – like the Pick-o-Light® system – which illuminates the correct parts for easy identification and retrieval.

### **5. Easy-to-understand Display:**

When you need to know how many of a certain part is in storage, Hänel's automated vertical storage solutions provide incredibly dynamic display units that generate insights to help you manage your inventory.

### **6. Reduced Production Delays:**

Not only do automated vertical storage solutions reduce the number of touch-points in your warehouse, but they help reduce time-to-pick and increase throughput.







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### 7. Minimized Errors:

Picking mistakes happen, but they are almost always due to human error. Surveys show that the top issue in over 45 % of warehouses is human error.<sup>(9)</sup> With automated vertical storage, picks are delivered directly to employees with incredible tracking, information display and tech assistance.

### 8. More Room for Operations:

Automated vertical storage systems reduce your storage space by up to 80 %! That means more room for operations and employee movement. Inventory no longer gets lost in the shuffle of an over-stuffed warehouse, and much of that product can be contained in one convenient location.

## How Hänel can Help

There's a reason that 83 % of businesses are currently interested in introducing warehouse automation into their supply chain – It's not just a competitive advantage... It's a necessity.<sup>(10)</sup> Hänel helps warehouses and distribution centers transform into production machines. With automated vertical storage systems like the customizable Hänel Rotomat® and Lean-Lift®, we can help you find the vertical automated storage solution that is right for you.

We design each product from the ground up with you in mind, and each system is specifically built for your application. Whether you need a custom solution with unique security features or specific dimensions, or a less complicated solution that can be rapidly integrated into a working environment – Hänel is here to help.

**Want to learn more about our automated vertical storage systems and what they can do for you?**

**Contact us!**

## The “Big 5” Advantages of Vertical Storage from Hänel

### More Floor Space

Vertical storage frees valuable floor space that can be used for other operations, and allows for larger inventory without the need for new construction.

### Improved Accuracy

Hänel's inventory management options can improve inventory accuracy to over 99%, reducing the risk of overstocking or parts shortages.

### Greater Productivity

More parts can be picked and placed in less time, with fewer people, for real time savings and a big boost in productivity.

### Increased Security

All valuable inventory items are contained under lock and key, protected by password access, RFID or magnetic card swipe.

### Better Ergonomics

All parts are brought directly to the operator, eliminating the need to walk, stoop, climb and carry to access traditional shelving.

## Products such as the Rotomat®, the Lean-Lift® and the Multi-Space® are high-tech products for automated storage solutions

With its numerous inventions, Hänel Storage Systems has made a significant contribution to the success of vertical carousels and vertical lift modules in the field of automated materials handling. This success is yet another incentive for our team to offer future-oriented solutions for intralogistics based on continuous further development.

Hänel storage systems find applications in a wide variety of industries. Operating in sectors such as medical technology, electrical engineering, mechanical engineering, automotive, aviation, pharmaceuticals, healthcare and wholesale – to name but a few areas that demonstrate its versatility – Hänel has the right solution for every application.

Numerous small and medium-size enterprises have also opted for the efficient storage systems from Hänel.

The modern Hänel microprocessor control systems enable continuous inventory updates and accurate inventory control. They can be used as stand-alone storage management systems or in conjunction with customer IT systems.

## The operating principle

### Hänel Rotomat® principle

Each Hänel Rotomat® is designed according to the tried-and-tested Ferris wheel model (vertical carousel principle) which means: goods to user and not user to goods.

#### This saves time!

The compact construction enables up to 60 % more storage capacity to be created on a minimal footprint by making use of the available room height.

#### This saves costs!

### Hänel Lean-Lift® principle

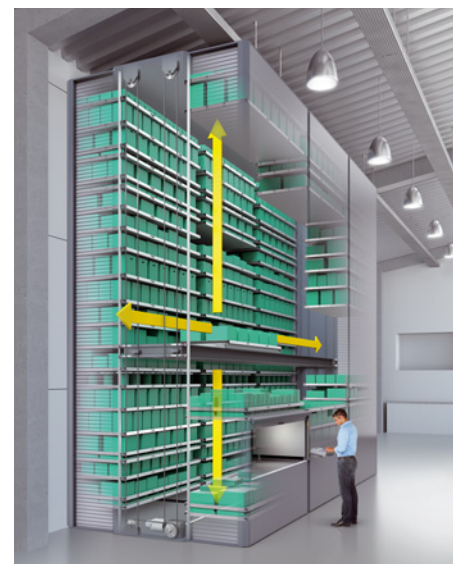
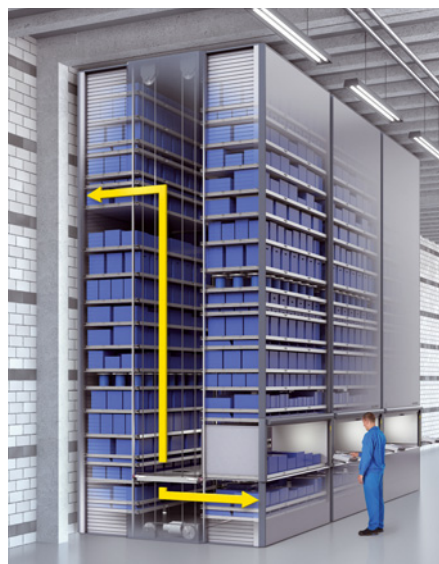
The Hänel Lean-Lift® is both storage rationalization and goods protection in one: At the center of the ‘cabinet’ is a computer-controlled positioning lift – called the ‘extractor.’

In front of it and behind it are the storage shelves. This is where the articles are kept in containers. The storage locations are accessed automatically under electronic control by means of the extractor, which stores or retrieves the requested container. The operator works comfortably in the ergonomically positioned retrieval area.

### Hänel Multi-Space® principle

Hänel has optimized the principle of three-axis storage systems with the Hänel Multi-Space®. In addition to the many advantages of the Hänel Lean-Lift® technology, the Hänel Multi-Space® offers maximum flexibility, speed and use of space.

With its advanced technology, Hänel is able to offer a three-axis storage system almost 9 m / 30 ft wide. The Hänel Multi-Space® can even be varied in width and height once installed – an innovation from Hänel! Even the number of retrieval points is variable and can be changed at any time.





# Hänel Headquarters in the United States



## We would like to know more: Fax (412) 787-3744

### Please send me brochures on:

- ☐ Hänel's Rotomat® office carousels
- ☐ Hänel's Rotomat® storage carousels
- ☐ Hänel's Lockomat®
- ☐ Hänel's Lean-Lift®
- ☐ Hänel's Multi-Space®
- ☐ The Intelligent Hänel Control and Software Technology
  
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**Hänel Storage Systems – Innovations and Perspectives in  
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action! **Send me the Hänel USB stick!**
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If you want to improve your intralogistics concept and  
reduce costs, you should talk to the specialists of Hänel first.  
They will join forces with you to develop your own

### 'tailor-made intralogistics concept.'

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### Hänel Storage Systems

121 Industry Drive  
Pittsburgh, PA 15275  
Tel. (412) 787-3444  
Fax (412) 787-3744  
E-Mail: [info@hanel.us](mailto:info@hanel.us)  
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