

The Hänel Group

Innovations and Perspectives in Intralogistics



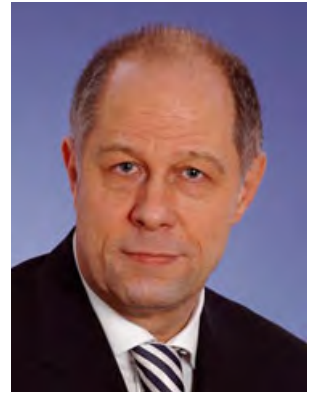
Ideas that move the world ...



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Chief Executive Hänel Systèmes, France

Hänel Office and Industrial Storage Systems

A company with tradition and future

Since the 1950s the name 'Hänel' has stood for innovative solutions in automated records and materials handling.

Today we are one of the world's leading providers in the industry.

Thanks to the continuous refinement of our products and software, the solutions we offer today will meet the requirements of tomorrow.

For all this technological progress, we are fully aware of our responsibility to the environment, and we always aim to achieve the highest possible environmental compatibility in our development and production processes. Hänel was, for example, the first producer of vertical lift technology to develop an EcoDrive® system, which converts the kinetic energy of the descending extractor into electrical energy and feeds it back into the electrical supply system. This is yet another contribution toward saving energy and protecting the environment.

The maxim of our company founder, Gerhard Hänel, was 'To do nothing by halves is the way of noble spirits' – an approach that defines our actions to this day. So we shall continue to develop efficient, ergonomic and space-saving storage solutions for your intralogistics and office organization needs well into the future.

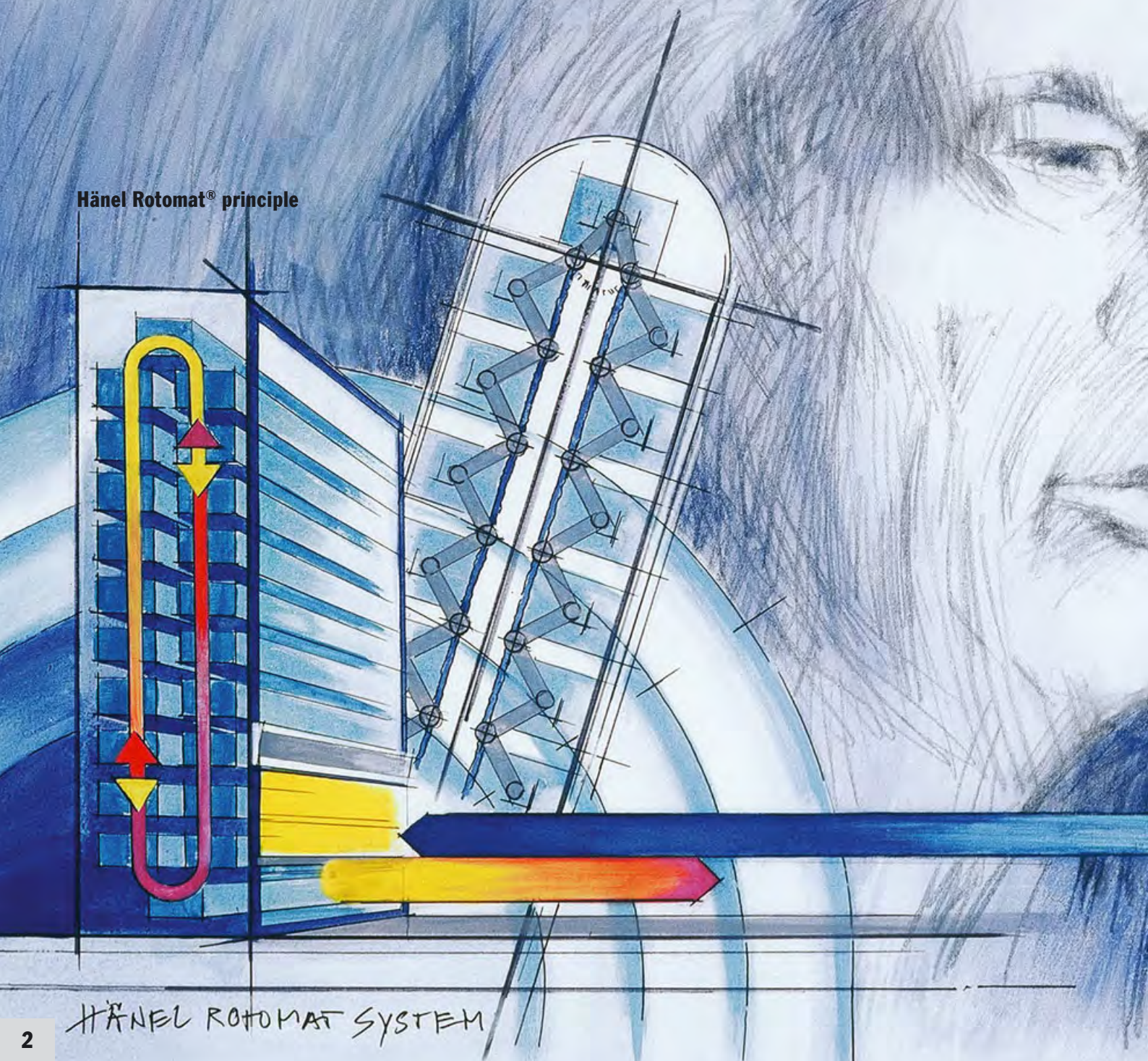
Kind regards

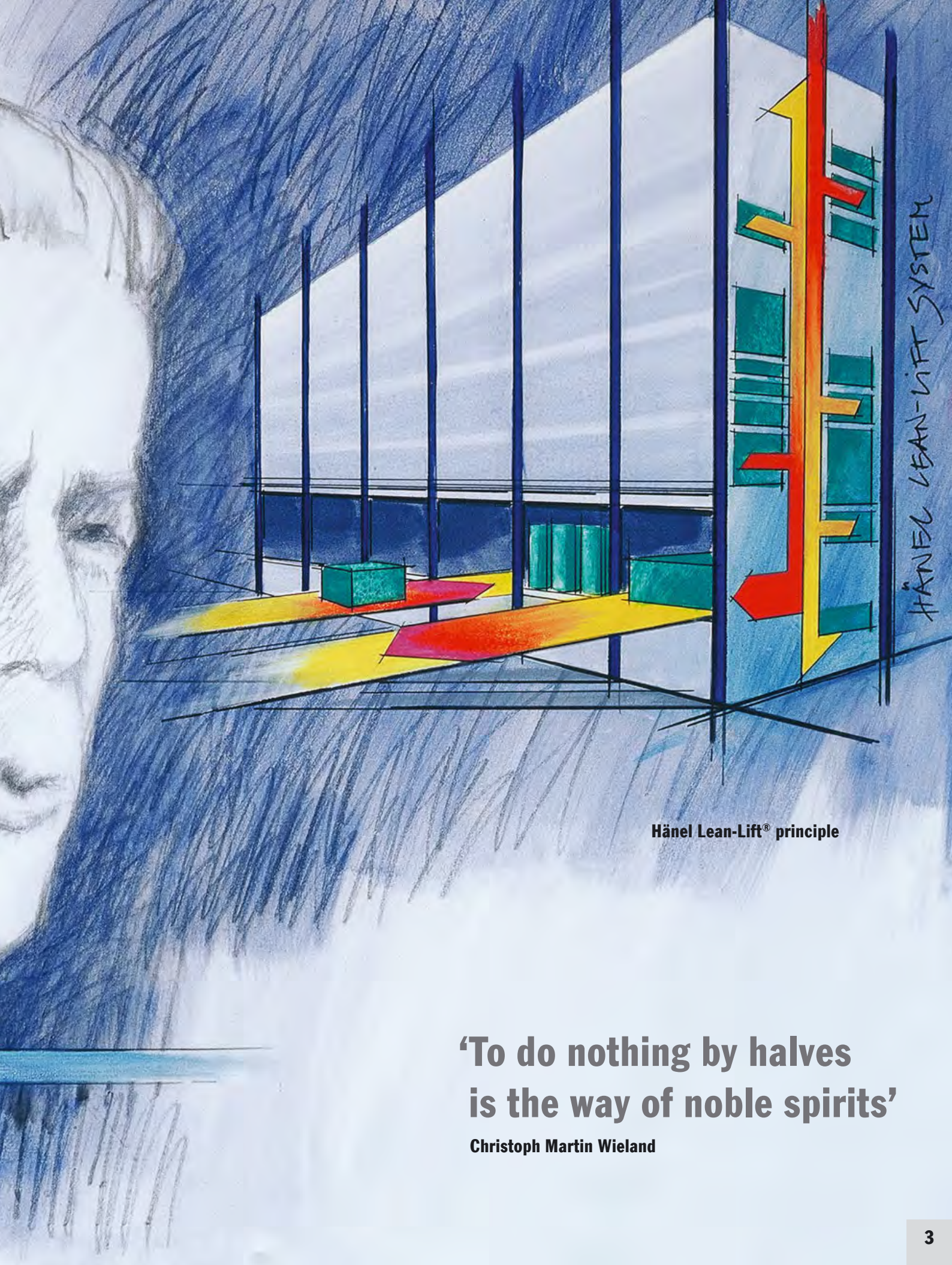
Dr. Christina Hänel

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Hänel Rotomat® principle





Hänel Lean-Lift® principle

**‘To do nothing by halves
is the way of noble spirits’**

Christoph Martin Wieland

No future without a past

Milestones in Hänel's success

1953



In 1953 Gerhard Hänel starts his own business for making **steel furniture** in **Lauter** (Saxony), Germany.

Gerhard Hänel founded **Hänel Büro- und Lagersysteme** in Bad Friedrichshall, Germany.

Hänel is the **first manufacturer in Europe** to series-produce filing carousels based on the Ferris wheel principle.

Hänel Plant 2 goes into operation in Wiesentheid/ Bavaria.

Hänel Precision Gears Bad Friedrichshall, Germany.

1933



1957

1968



70s

At the start of the 70s the first Hänel **industrial vertical carousels** are launched.

In Altstätten SG, Switzerland, Hänel Plant 3 starts production.

As early as 1973, Hänel was looking into light-weight construction techniques and developed the first **aluminum-based vertical carousels**. This technical achievement has remained unmatched to this day.

1972



1973



Hänel designs and produces **heavy-duty carousels** with a **storage capacity of over 10 tons**. Unprecedented at the time!



1978

The 1980s saw the development of a wide range of industrial storage carousels for the global market.

Hänel launches the **MP 20** and **MP 30 controllers** based on a new **integrated warehouse management concept**.



80s

New branches established – Hänel USA and Hänel France.

Hänel Netherlands followed **early in 1990**.



Hänel Rotomat® Autolift 1000

Hänel develops this automated system so that various kinds of bins can be loaded into Rotomat® industrial lifts quickly and efficiently.



1992

1993

Hänel Germany is the first company in its sector (vertical lift technology) to be awarded the ISO 9001 certificate.



First Lean-Lift® with vertical technology and 551 lbs/250 kg payload capacity per container.
Hänel sets the standard in vertical lift technology by inventing the Hänel profile wall.

1994

Hänel Altstätten is also awarded ISO 9001 certificate – the first company in its sector (vertical lift technology) in Switzerland.

1995

Market launch of the Hänel MP 10 A and MP 12 A controller.

1996

97/98

Lean-Lift® with 1,102 lbs/500 kg payload capacity per container.

Massive expansion of manufacturing capability with state-of-the-art production technology.



Lean-Lift® with 2,204 lbs/1,000 kg payload capacity per container.

2001

Introduction of HänelSoft® – the high-performance and flexible warehouse management software.

Market launch of the Hänel MP 12 D controller.

Hänel opens a new Demo Center in Bad Friedrichshall.

1999



Hänel moves into its new administration building.

Presentation of the new Hänel MP 100 D central control system with communication supported via Ethernet.



2003

Hänel PictureControl
Hänel is the first manufacturer in Germany to offer the option of fitting its vertical lift modules with digital camera technology.

In a world premiere at the CeMAT trade fair, Hänel unveils the patented 3-axis Multi-Space® storage system – the new definition of vertical lift technology.



2004

2005

Integration of an Ethernet interface in the Hänel MP 12 N controller.

In 2006 Hänel introduces touch screens for keyboard control terminals installed in lift systems.

2006



2008

Hänel, the inventor of the extractor with double container placement, perfects this system and develops the **Hänel Lean-Lift® in DualDrive® design.**

The production floor area in Wiesentheid Plant 2 is expanded by 51,667 sq ft/4,800 m². This expansion more than doubles the production area available at the site.

Hänel Autolident® – automatic item and storage position identification.



Hänel introduces an EcoDrive® version of the Lean-Lift® – a world first for producers of storage systems. CO₂ reductions thanks to efficient energy recovery using a frequency converter with feedback unit.

2009

Celebration of Gerhard Hänel's 100-year anniversary.



Hänel presents its new **high-end MP 12 N controller** with four modes of operation and integrated warehouse management.

2010

At CeMAT 2011 Hänel unveils a large number of innovations, including the new **Hänel EcoConcept** and the **Hänel Rotomat® in a high-speed version**.

2011



At CeMAT Hänel also introduces the award-winning **Hänel VendiShelf®** system for safe and secure storage.

2012

Hänel moves to a new building in 2952 DA Alblasserdam, Netherland.

Hänel innovations at CeMAT 2014:

Hänel Lean-Lift® in extra-wide design with a container width of up to 14.63 ft/4,460 mm.

Hänel Soft®-N

The successful Hänel warehouse management software with new functions and design.



2014

Hänel controllers as SAP terminals

Direct implementation of the SAP/Hänel storage management template in SAP using HTTP and SOAP.



2016

Hänel launches the new MP 14 N controller – a world premiere at CeMAT 2016.

In collaboration with one of its customers, Hänel installs two Hänel Lean-Lift® systems which are operated via wireless augmented reality technology.



2017

A world premiere at CeMAT 2018 in Hanover, Germany: Hänel launches the cost-effective Smart Picking concept and Pick-by-Voice control for Hänel storage systems.



2018

Robotic handling technology for the Hänel Lean-Lift®

Hänel specialists collaborate with Baumann Automation to develop an innovative solution for robotic handling and storage processes.



2020

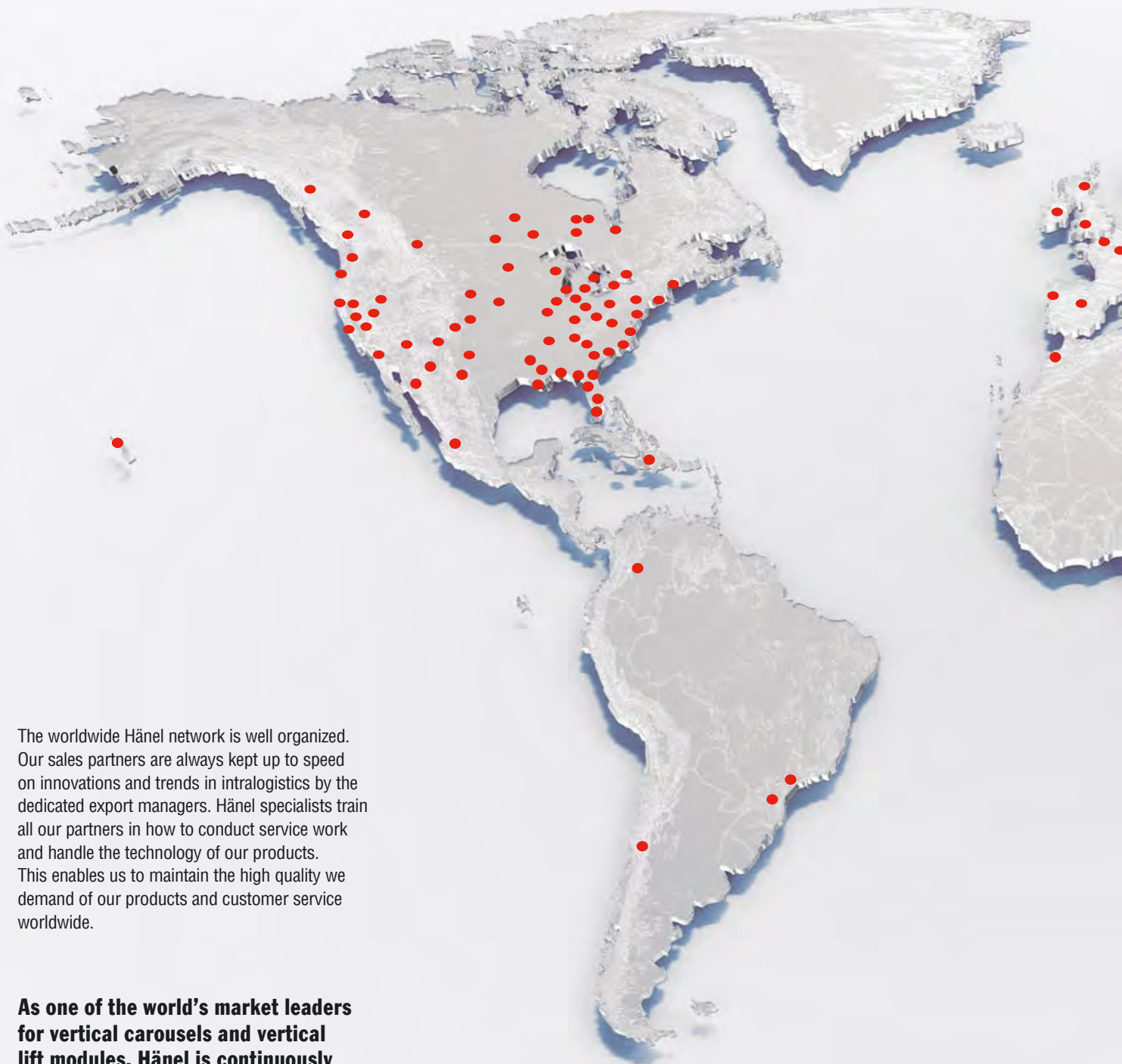
Hänel Storage Systems moves to a new site in Warrendale, PA, USA



Today

Hänel is one of the world's leading manufacturers of storage and organization systems, with distributors in over 60 countries.

The international Hänel network – our partners in more than 60 countries worldwide



The worldwide Hänel network is well organized. Our sales partners are always kept up to speed on innovations and trends in intralogistics by the dedicated export managers. Hänel specialists train all our partners in how to conduct service work and handle the technology of our products. This enables us to maintain the high quality we demand of our products and customer service worldwide.

As one of the world's market leaders for vertical carousels and vertical lift modules, Hänel is continuously expanding its network.



● Hänel distribution partners

The sales organization at a glance

The Hänel Group



Hänel Büro- und Lagersysteme
Bad Friedrichshall, Germany



Hänel Präzisions-Zahnräder
Bad Friedrichshall, Germany



Hänel Büro- und Lagersysteme
Altstätten, Switzerland



**Hänel Kantoor- en
Magazijnsystemen**
Alblasterdam, Netherlands



Hänel Storage Systems
Warrendale, USA



Hanel Systèmes
Créteil, France

Distribution Centers

Australia	Indonesia	Slovenia
Austria	Ireland	South Africa
Belarus	Italy	South Korea
Belgium	Kazakhstan	Spain
Brazil	Latvia	Sweden
Bulgaria	Lithuania	Taiwan
Croatia	Luxembourg	Thailand
China	Malaysia	Turkey
Chile	New Zealand	Ukraine
Denmark	Norway	United Kingdom
Estonia	Philippines	Vietnam
Finland	Poland	
Germany	Portugal	
Hong Kong	Romania	
Hungary	Serbia	
India	Singapore	

Algeria	Libya	Switzerland
Bahrain	Liechtenstein	Tunisia
Czech Republic	Morocco	United Arab Emirates
Egypt	Nigeria	
Iraq	Oman	
Israel	Pakistan	
Jordan	Qatar	
Kuwait	Saudi Arabia	
Lebanon	Slovak Republic	

Canada	Colombia
Central America	Mexico
	USA

Netherlands

France

Hänel production plants



Hänel Plant 1
Bad Friedrichshall, Germany

Gerhard Hänel founded Hänel Office and Industrial Storage Systems in 1953. By 1957 Hänel was series-producing filing carousels based on the Ferris wheel principle – the first manufacturer in Europe to do so.

Today Rotomat® carousels and Hänel Lean-Lifts® are produced in three manufacturing plants – and exported worldwide. Hänel has distribution partners in over 60 countries throughout the world.

Innovation and performance, dynamics and ideas, new technologies and team spirit have made Hänel one the leading providers of storage and organization systems.



Hänel Precision Gears
Bad Friedrichshall, Germany



Hänel Plant 2
Wiesentheid/Bavaria, Germany



Hänel Plant 3
Altstätten SG, Switzerland





High-tech production for high-end demands

Highly qualified specialists implement the ideas of the planning engineers using cutting-edge manufacturing techniques

The linchpin of the production facility is the modern storeroom for sheet metal pieces which is situated centrally in the plant. From here the unworked metal sheets and also sub-assemblies are fed automatically to the machining centers and then returned to buffer storage.

The punching and laser work on the sheet metal pieces needed for production is carried out on TruMatic and TruPunch machines from the company TRUMPF. Automatic loading systems are available to feed the machines.

In order to guarantee the consistently high quality of Hänel products, state-of-the-art welding procedures are carried out by fully automated precision robots in a welding center developed specially for Hänel.

To ensure we can produce the high number of containers required, we use high-efficiency bending machines with robot technology.

Responsibility for the environment

It goes without saying that production at our three plants meets the latest environmental guidelines. Only environmentally friendly, recyclable materials are used.



TRUMPF TruPunch 5000 – one of the most modern punching machines in the world



Fully automated welding center designed specially for Hänel



High-efficiency bending machines with robot technology





Quality and leading-edge technology

Hänel Office and Industrial Storage Systems

Products such as the Rotomat®, the Lean-Lift® or the Multi-Space® set the benchmarks for the automated storage technology sector

These dynamic storage systems are designed according to the vertical carousel and conveyor principles, which mean goods to man and not man to goods. The compact design enables maximum storage capacity to be created on a minimal footprint by making use of the available room height.

Modern Hänel microprocessor control systems provide continuous inventory update and accurate inventory control. They can be used as stand-alone storage management systems or communicate with customer IT systems.

With its numerous inventions, Hänel Office and Industrial Storage Systems has made a significant contribution to the success of vertical carousels and vertical lift modules in the sector 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 offers tailored intralogistics concepts for all needs – from small businesses to major industrial enterprises!

Live presentation of Hänel storage systems in the Demo Center, Bad Friedrichshall





Hänel ROTOMAT

Hänel ROTOMAT

The Hänel Rotomat® principle 'Vertical carousel technology' – simply ingenious

The principle is simple.
Its applications are brilliant



Hänel Rotomat® office carousel – the right file is found among thousands of hanging folders in seconds

The compact design of the Hänel Rotomat® enables **more than 60 % storage area** to be created on a minimal footprint by making use of the available room height.

The structural design

Self-supporting steel plate casing, comparable to the cellular structure used in the aircraft industry. Lockable, smooth-running sliding doors. Environmentally friendly powder coating, as well as impact-resistant and shock-proof stove enamel finishes. There are five attractive colours to choose from. Customized finishes are possible.



Hänel intralogistics solutions offer small and medium-size enterprises an affordable entry to efficient storage management. Here we have a Hänel Lockomat® and a Hänel Rotomat® for tool storage



The operating principle

The Hänel Rotomat® creates an enormous amount of storage volume on a small footprint. It works on the Ferris wheel principle, i.e. the goods come to the operator, not the operator to the goods.

Hänel Rotomat® office carousels
The optimal filing systems for office and administration

Hänel Rotomat® storage carousels

Top order-picking performance due to short travel paths

Hänel Lockomat®
Safe and secure retrieval



Vertical technology – simply brilliant

The Hänel Lean-Lift® and the Hänel Multi-Space®

The Hänel Lean-Lift® with height-optimized storage lets the air out of your store!

The automated 'high-bay warehouse in a cabinet'

The Hänel Lean-Lift® is both storage rationalization and goods protection in one: At the center of this closed system is a computer-controlled positioning lift – the 'extractor'. In front of it and behind it are the storage shelves. The goods are then delivered to the retrieval area at the correct ergonomic height.

A highlight of the Hänel Lean-Lift® is the height-optimized storage concept. When the container is drawn in, the highly accurate light barriers measure the articles, and the Hänel

microprocessor control system finds the optimum storage location in the Hänel Lean-Lift®.

With its height sensors, the Hänel profile wall and space-saving slot design, the Hänel Lean-Lift® utilizes the available storage volume extremely efficiently.

This ingenious principle finds applications in a wide variety of industries. Used in the medical technology sector and electrical engineering (for which ESD versions are possible) and also in the automotive, aircraft and pharmaceutical industries as well as in mechanical engineering, the mail-order and wholesale trades – the Lean-Lift® is the ideal buffer, dispatch, production or tool store, to name but a few areas that demonstrate its versatility.

Hänel also offers small and medium-size enterprises an affordable entry to efficient storage management with its intralogistics solutions.

Our specialists would be happy to show you references from your line of business – just send us an inquiry!



This Hänel Lean-Lift® has a height of more than nine meters to provide a huge amount of storage capacity and thus save considerable floor space

Intralogistics in a new dimension – Hänel Multi-Space®

The innovative 3-axis storage system from Hänel with the many advantages of time-proven Hänel Lean-Lift® technology. Whether it operates as a stand-alone solution, in a network with other Multi-Space® units or in combination with Lean-Lifts® and Rotomats® – the Hänel Multi-Space® offers another innovative solution for your intralogistics!

The new definition of vertical lift technology from Hänel!



Items stored in the Hänel Multi-Space® are transported with maximum speed because the extractor moves horizontally and vertically

Our strength lies in our know-how

Hänel Control and Software Technology

Hänel's microprocessor control units and inventory management software enable efficient, rationalized workflow

Hänel sets the standard for control systems

Object-related, practice-oriented microprocessor control units can offer you a complete storage management system. The modern design and intuitive handling are exemplary. A complete range of storage management features is already integrated in the controllers.

Efficient and transparent storage is possible without an additional PC. And of course the Hänel storage units can be integrated into the customer's IT system.

Connection to enterprise resource planning systems is no problem. Hänel also offers software solutions for individual requirements.



The new Hänel MP 14 N controller is very easy to use thanks to the 12-inch touch screen. There is plenty of space for information, even when the keyboard is displayed on the screen

Hänel software systems rationalize storage operations and provide optimal transparency in the storeroom!

For every application there are powerful software packages that can be tailored to each customer's needs thanks to useful configuration options and a range of standard modules.

Storage management

Control software

for Hänel storage systems networked with HOST-supported ERP systems.

Tool management

Storage management

with Hänel storage systems – from incoming goods to dispatch.

Talk to our specialists – we would be happy to advise you!



Hänel offers software solutions for individual requirements

Quality signed and sealed

Innovative developments and state-of-the-art production technology

Hänel – a company committed to top quality

Quality starts with consulting

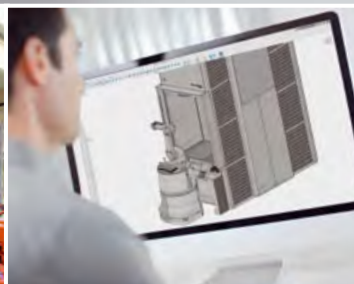
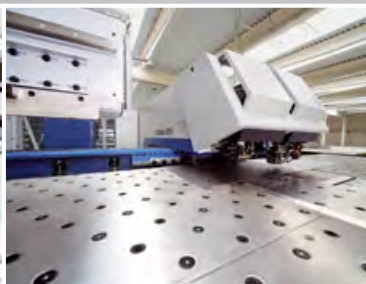
No two Hänel lifts are the same. Simply because each task requires a unique approach.

That's why, at Hänel, high quality of consultancy takes first place alongside product quality. On the basis of your requirements and our experience we develop a complete solution tailored to your needs.

Despite automation, the focus at Hänel is on people. They are the ones who coordinate the different production steps and monitor quality constantly.

On September 1, 1993, Hänel Germany was awarded the international certificate of quality according to ISO 9001 by the 'German Association for Certification of Quality Management Systems'. It was the first company in its field (vertical lift technology) to achieve this distinction.

And in 2020 once again the process-oriented quality management of Hänel was acknowledged by the technical control board TÜV Hessen with the current DIN EN ISO 9001:2015 Certificate.



Ideas that move the world...

Cutting-edge technology 'Made by Hänel'

- ▶ For over 65 years the name Hänel has stood for innovation, progress and high-quality products in the storage technology sector.
- ▶ Hänel storage systems can be integrated in almost any enterprise IT environment at locations worldwide thanks to intelligent Hänel control systems and an open architecture.
Intralogistics 4.0 with Hänel!
- ▶ Consulting excellence is a top priority at Hänel. Based on your requirements and our experience, we develop a complete solution tailored to your needs.
- ▶ Hänel was a finalist for the IFOY AWARD 2021 – also known as the 'Oscar of Intralogistics'.
- ▶ Hänel Germany was the first company in the vertical lift industry to receive ISO 9001 quality management certification in 1993.
- ▶ In keeping with innovative technological progress, we are fully aware of our responsibility to the environment, and we always aim to achieve the highest possible environmental compatibility in our development and production processes.
- ▶ The Hänel **EcoConcept** enhances the energy efficiency of Hänel storage systems and helps reduce CO₂ emissions.
- ▶ Hänel is one of the leading manufacturers of storage systems worldwide with more than 60 sales centers in over 60 countries.
- ▶ Successful enterprises around the world opt for quality and leading-edge technology 'Made by Hänel'.

Visit the Hänel website to learn about innovative Hänel solutions in operation at customer sites worldwide

www.hanel.us/us/solutions



The Hänel product portfolio – the right solution for every need!



Hänel Rotomat® office carousel

The Hänel Rotomat® is the optimal filing system for office and administration.

Folders, index cards or files – the Hänel Rotomat® keeps them all in order. It finds the right file from among thousands of hanging folders and retrieves it in seconds. The powerful Hänel micro-processor control systems enable the Rotomat® to be networked directly with a PC.

All Rotomat® office carousels are also available in a version suitable for disabled operators.



Hänel Rotomat® storage carousel

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

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. No two Hänel Rotomats® are the same, because each task demands a precisely defined solution.



Hänel Lean-Lift®

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 goods are then delivered to the retrieval area at the correct ergonomic height.



Hänel Multi-Space®

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 over 29.5 ft/9 m wide.

Even the number of retrieval points is variable and can be changed at any time.



The intelligent Hänel control and software technology

Our strength lies in our knowledge. Because only object-related, practice-oriented microprocessor control units can offer you a complete storage management system. Hänel storage systems can also be controlled via computer interface, of course. Interface with enterprise resource planning systems is no problem.

Hänel also offers software solutions for individual requirements. HänelSoft®-N for example is a powerful software package that can be tailored to any customer's individual needs.



Efficient tool storage with Hänel industrial lift systems

Products such as the Lean-Lift®, the Multi-Space®, the Lockomat® and the Rotomat® are high-tech systems for automated tool storage.

Alongside ergonomic design, inventory protection and many system innovations, we assign top priority to the cost-efficiency of these solutions.

Hänel storage systems are compatible with nearly every tool management system now available.