

**70** 70 Year Anniversary  
1953 – 2023  
**JUNGHEINRICH**

**YELLOW  
MOMENTS**

**1953 – 2023**

## ABOUT THIS MAGAZINE

Dear readers,

This chronicle tells the story of Jungheinrich in a selection of defining moments, and shows what they set have in motion – both yesterday, today and in the future.

The magazine follows the production of the film “**Yellow Moments** – 70 Years of Jungheinrich”.

As in the film, both current and former employees tell us about their **Yellow Moments** at Jungheinrich.

Over the following pages, a chronological sequence takes you through seven decades of company history in words, pictures and film sequences that you can access via the QR codes.

We hope you will enjoy learning more about our **Yellow Moments**.

Click here to watch the film  
“**Yellow Moments** –  
70 years of Jungheinrich”!



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## YELLOW MOMENTS – 70 YEARS OF JUNGHEINRICH

We tell the story via **Yellow Moments** and show what these moments have set in motion at Jungheinrich – both yesterday, today and in the future.

**1950s – The name “Ameise”**

**1960s – The right push**

**1970s – His last project**

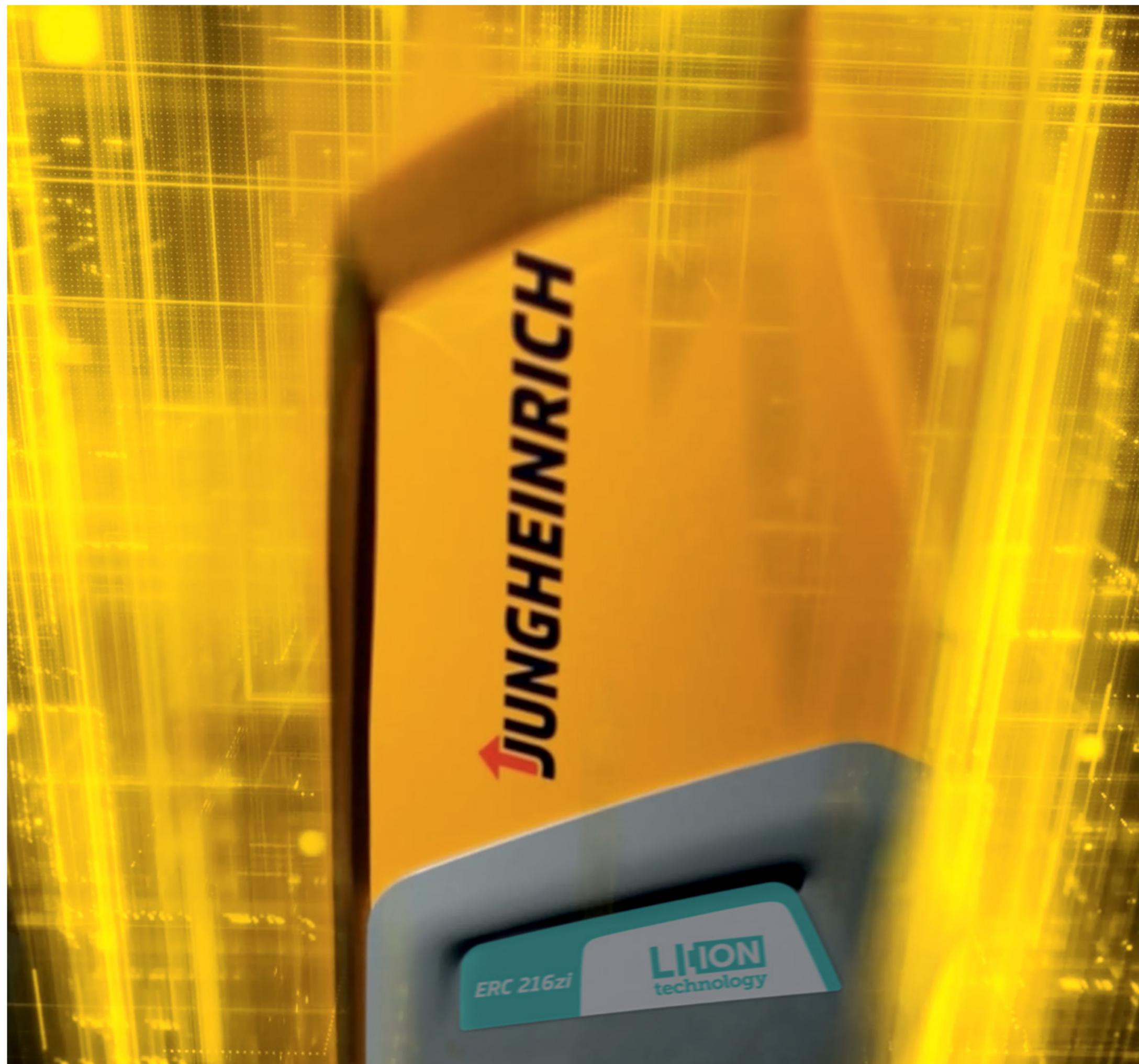
**1980s – The barcode**

**1990s – Global player**

**2000s – The hunch**

**2010s – The presentation**

**2020s – We are designing the  
warehouse of the future**



## IT BEGAN WITH AN IDEA

After the Second World War, Dr Friedrich Jungheinrich laid the foundations for today's company while still working for his father's company H. Jungheinrich & Co., which at that time manufactured the first mechanical transport equipment.

The brand name “Ameise” (the German word for “ant”) is quickly chosen for the products and becomes a fixed term – a **Yellow Moment!**



You can hear the original statement by Dr Friedrich Jungheinrich here.

“THE ANT CARRIES VERY HEAVY LOADS COMPARED TO ITS BODY. THIS MAKES IT A SYMBOL OF INDUSTRIOUSNESS: A HARD-WORKING AND FRUGAL CREATURE, WHICH INSPIRED ME TO COME UP WITH THE NAME.”

DR FRIEDRICH JUNGHEINRICH

### Foundation of H. Jungheinrich & Co. Maschinenfabrik

By producing forklifts with a driver's seat, Jungheinrich is able to join the group of industrial businesses essential to the expansion of the economy.

On 7 August 1953 the time has come: Dr Friedrich Jungheinrich and his brother-in-law Dr Werner Rosenkranz register H. Jungheinrich & Co. Maschinenfabrik (HJC) in the Commercial Register of the Hanseatic City of Hamburg – and the present-day company was born.

## THE NAME “AMEISE”

In the 50s, “Ameise” becomes a brand name.

“Ameise” quickly becomes an established term – regardless of the manufacturer – and contributes to the success of the Jungheinrich company, especially in its early years.

**It is ideas and moments like these that have made Jungheinrich a pioneer in intralogistics over 70 years.**

**We call these moments like these, which significantly change course of the company's history,**

**Yellow Moments.**



Two arrows – a horizontal one crossed by a vertical arrow – symbolise the directions in which goods and material are transported.



New truck type: The electric forklift with driver's seat "Ameise 55" is premiered at the 1953 Hanover Messe.

**Fundamental milestone – born electric!**

The idea to equip mechanical pallet trucks with an electrical drive had been geminating in Dr Friedrich Jungheinrich for a long time. His first electric tiller pallet truck has a DC electric motor. All controls – travel direction, as well as lifting and lowering loads – are operated via switches on the tiller handle. When the truck is empty, workers can stand on the platform and use the pallet truck as a vehicle. This increases the operating speed while simultaneously decreasing the physical load.

In the early stages of the sales process, Dr Friedrich Jungheinrich primarily sells his transport equipment

directly to businesses. He largely does without intermediaries, which is uncommon in the industry. Rainer Bartram, a long-time employee and salesman, sends back critical information from his company visits to ensure that Jungheinrich can systematically align production and products with consumer requirements. Production starts in a workshop at Bachstrasse 48 in Hamburg-Barmbek. When the capacity limits were reached here, new production facilities had to be found. In the new halls at Billbrookdeich, the employees then assemble a new truck type: an electric forklift with driver's seat. Jungheinrich presents this new "Ameise 55" (A55), truck to trade fair visitors at the Hanover Messe in 1953.

**Growing markets, direct to the customer**

In the years of Germany's "Wirtschaftswunder" (economic miracle), Jungheinrich also continues to boom. The issue of transport and warehouse rationalisation becomes increasingly important: as labour becomes increasingly scarce in the 1950s, companies invest more and more in modern warehouse and material handling equipment.

While the competition increasingly specialises, Jungheinrich keeps the small items transport equipment in its range, thereby maintaining a wide product range to serve the wishes of its customers.

In addition to a large number of product innovations, Jungheinrich develops its first own electric motor as early as 1956, which was deployed in more than 28,000 Jungheinrich trucks by 1965.

Technical innovations are only one pillar of the success: systematic expansion of direct sales and the service network comprise the others. After the first subsidiary in Mülheim an der Ruhr, others open in quick succession. From the start, the employees in the sales department are not just salespeople, but also specialists. Jungheinrich thus lays the foundation for today's tasks of material flow analysis and logistics systems as early as the 1950s.

Parallel to the expansion of business activities in Germany, exports grow. In the mid-1950s, the company founder makes a trend-setting decision to expand the sales and service network throughout Europe; the export share increases. In 1956, the first foreign subsidiary is opened in Vienna; "Ameise Italiana" and "Ameise Svenska" follow. In the 1960s, the network of European foreign subsidiaries is consistently expanded. In quick succession, sales offices are established in the Netherlands, Great Britain, Denmark, Switzerland and France. The export department is also active behind the "Iron Curtain", for example in Czechoslovakia. In 1958, exports accounted for some 30 per cent of the company's turnover; by 1967, the share of foreign business in the company's turnover had already risen to 50 per cent.

Family: Dr. Friedrich Jungheinrich with his wife Ilse, daughter Ursula Lange and grandchildren Wolff, Hadmut, Petra, Gabriele and Susanne.



## MOVE TO THE TRADITIONAL LOCATION FRIEDRICH-EBERT-DAMM

The steadily growing demand for forklifts makes a move to a larger production facility increasingly urgent. In 1957, Jungheinrich moves production from Billbrookdeich to Friedrich-Ebert-Damm.

The first reach truck, called the "Retrak", is also developed and produced here – a **Yellow Moment!**



You can hear the original statement by Dr. Friedrich Jungheinrich here.

**"THIS IS A VEHICLE THAT I HAVE INTRODUCED IN EUROPE. IT IS KNOWN AS THE REACH TRUCK (...)"**

DR FRIEDRICH JUNGHEINRICH

In addition to the "Retrak", the new Junior series is produced at Friedrich-Ebert-Damm from 1960 onwards: compact, inexpensive and powerful trucks that use car batteries instead of large and expensive special batteries. The first tiller forklift in the Junior series is the EJC, which quickly becomes the "Volkswagen" of forklifts. In 1962, Dr. Friedrich Jungheinrich uses the pedestrian pallet truck of the Junior series to design the "Ameise Teletrak", a non-rail forklift that does not require an operator. The control system works optically: photo resistors attached to the head of the truck scan a guide strip attached to the floor. A protective bracket stops the device immediately at the slightest contact with an object or a person.

According to the trade press, the "Teletrak" makes a noteworthy contribution to warehouse automation and thus to cost reduction.

## THE RIGHT PUSH

The "Retrak" is the result of years of effort to build short, manoeuvrable forklift trucks. The introduction of the moving mast reach truck changed intralogistics significantly. With its mast that can be moved forwards, it saves a lot of space when manoeuvring and allows for more storage area. And since its market launch, the truck has been continuously further developed.

**"Well, I believe that the moving mast reach truck made a huge contribution to Jungheinrich's development. And that's why Dr Jungheinrich launching this product on the market is absolutely ..."**

**... a Yellow Moment for me."**

(Markus Lippert, Head of Main Segment Reach Trucks & Tow Tractors)



“WELL, I BELIEVE THAT THE MOVING MAST REACH TRUCK MADE A HUGE CONTRIBUTION TO JUNGHEINRICH'S DEVELOPMENT.”

MARKUS LIPPERT, HEAD OF MAIN SEGMENT REACH TRUCKS & TOW TRACTORS



End of an era

On 28 January 1968, Dr Friedrich Jungheinrich dies of cancer at the age of 68. He is mourned by his family and employees.



Dr Friedrich Jungheinrich and wife Ilse

Markus Lippert, Head of Main Segment Reach Trucks & Tow Tractors

The company is growing. The Jungheinrich Group inexorably develops into an internationally oriented group. The factory on Friedrich-Ebert-Damm also soon becomes too small. The first production site outside Hamburg is built on an 80,000 square metre plot of land in Friedrichsgabe near Norderstedt.

From December 1965, a repair workshop and spare parts production for older series are housed here. Hubertus-Regal Herstellungs- und Vertriebs-GmbH, founded by Jungheinrich in 1959, also moves its headquarters to Norderstedt.

In 1966, a branch factory was added in Brunn near Vienna for the production of hand pallet trucks for export. One year later, Akkutechnik Ladegeräte GmbH & Co KG was founded to produce (battery) chargers and pulse controls.



## START OF A NEW ERA

After the death of the company's founder on 28<sup>th</sup> January 1968, Jungheinrich remains an independent family business under the management of the daughters Ursula Lange and Hildegard Wolf. Rainer Bartram becomes head of the Group's holding company, while Klaus Rosenkranz, nephew of the company's founder, becomes the Chief Executive Officer (CEO) of the Hamburg-based H. Jungheinrich & Co. Maschinenfabrik. The new management team is proceeding with the solid financial policy and also adheres to the strategy of organic growth.

**"YES, THE PEOPLE WHO CAME TO THE TRADE FAIR SAID THAT THE THING WAS DEFINITELY A HIT, AND THE ORDERS ROLLED IN. IT COULD LIFT TWO TONNES AND 12 METRES HIGH, THAT WAS UNIQUE."**

SIEGFRIED DÄMMICH,  
FORMER EMPLOYEE (1966–1992)

The demand for Jungheinrich trucks is greater than ever. And so is the success. One major contributor to this is the new ETX high-rack stacker, the product innovation of 1968 and the last project by the company founder. After the "Retrak", this is the next milestone for better usage of warehouse height – a **Yellow Moment!**

### From the "Ameise" to the complete warehouse system

Growing consumption is changing the demand for constantly available items. Industrial and wholesale warehouses are increasingly developing from pure stockpiling into distribution centres where storing, compiling and distribution are interlinked.



Successful product presentation: Hamburg's First Mayor Dr Herbert Weichmann (1965–1971) visits.

Material flow organisation is becoming a central task that can only be solved with complete warehousing systems. Jungheinrich recognises this trend at an early stage and designs "tailor-made solutions" for its customers, from the planning of high-rack warehouses to the implementation of total and partial solutions in the area of in-plant transport and warehousing.

## HIS LAST PROJECT

**The high-rack warehouse – now an indispensable part of intralogistics.**

The prerequisite for storage at great heights is created by a **Yellow Moment** in the late 1960s. It is the new ETX high-rack stacker, the product innovation and trade fair highlight of 1968.

**"Yes, the people who came to the trade fair said that the thing was definitely a hit, and the orders came in. It could lift two tonnes up to 12 metres high, that was unique.** (Siegfried Dämmich, former employee 1966–1992)

High-rack warehouses, stacker cranes, small parts warehouses and many other warehouse solutions are the result of Dr Friedrich Jungheinrich's latest major project.

**A Yellow Moment.**



Strategically, the planning and sales of system solutions are transferred from Lagertechnik KG to Maschinenfabrik – a significant decision that pools extensive experience in the areas of forklifts and warehouse systems.

**Growth despite recession**

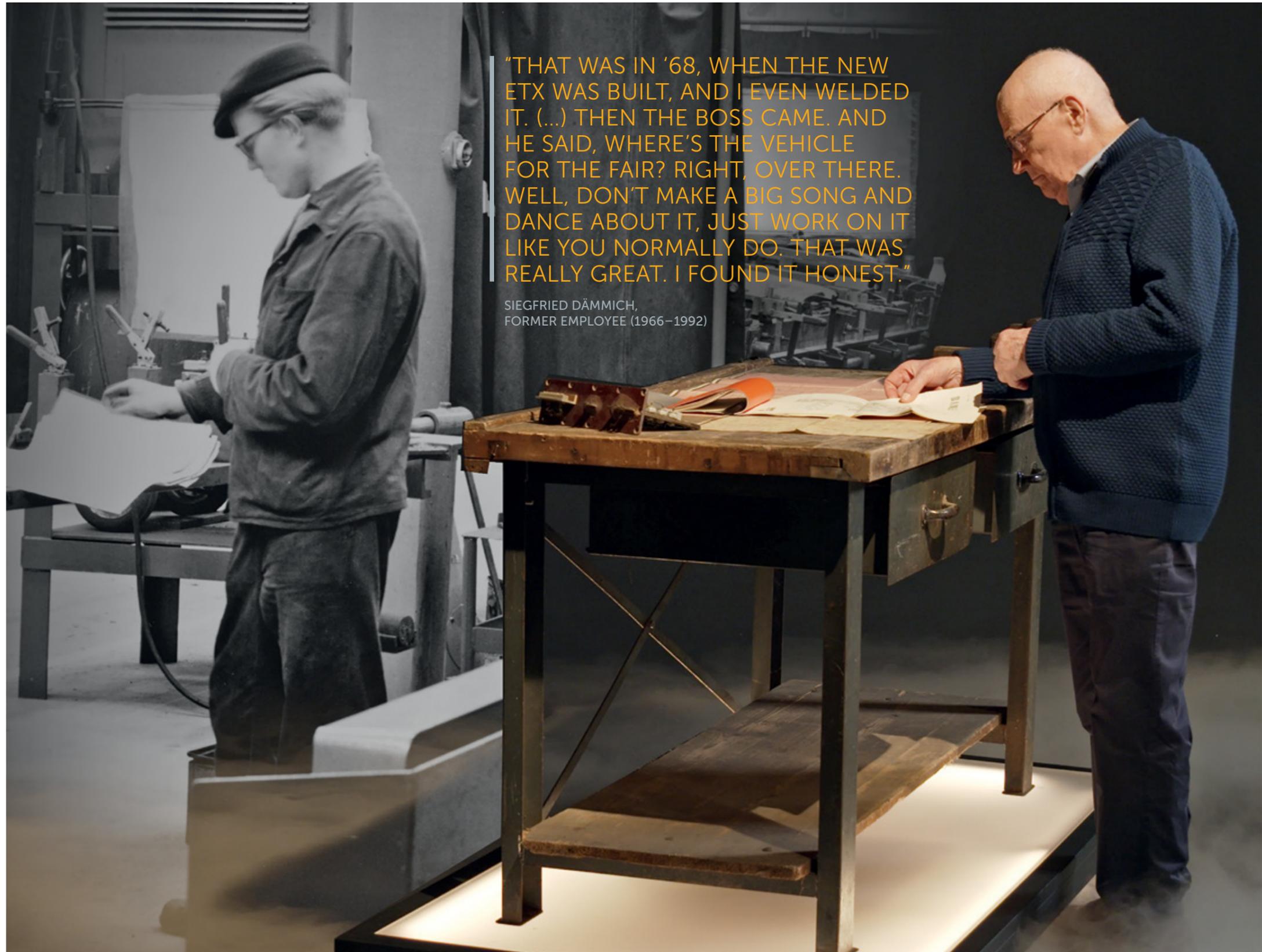
Despite the onset of the economic crisis in 1973, the shareholder families and company management remain set on their growth course. The company is one of the first in the industry to start doing business with rental and used equipment. In addition to trading in used equipment and the short-term rental of forklifts, this also includes financial services such as long-term rental and leasing. The new division quickly develops into an important mainstay that will compensate for the decline in the new trucks business in later times of crisis.

Jungheinrich also intensifies its sales activities in other countries. In 1974, the Hamburg-based company takes over one of the leading manufacturers of hand pallet trucks in France, Mécanique Industrielle Chimique S.A., or MIC for short. This is interesting, because in addition to a high presence on the French market, the company also has a strong export position, especially in the USA.

**Concentration on core competence – intensification of foreign business**

At the end of 1974, Rainer Bartram, Dr Friedrich Jungheinrich's long-time companion, leaves the company management and the operative business. On 1 January 1975, Klaus Rosenkranz takes over as Chairman of the executive management of the Group holding company. However, he takes the helm at Jungheinrich at a difficult time. Due to the economic downturn brought on by the financial crisis, the market for warehousing equipment is characterised by fierce competition. From then on, business is concentrated on what Jungheinrich has always excelled at: building forklifts. With this strategy, Rosenkranz succeeds in concluding 1976 with a strong increase in sales.

Jungheinrich also sets the course for future growth in exports. The commitment in the USA is strengthened. With the help of the extensive MIC dealer network, Jungheinrich finds access to the US market. With new companies in Belgium and Spain, market shares in Europe are further expanded, thus increasing the already high share of foreign business in total sales to some 60 per cent.



“THAT WAS IN '68, WHEN THE NEW ETX WAS BUILT, AND I EVEN WELDED IT. (...) THEN THE BOSS CAME. AND HE SAID, WHERE'S THE VEHICLE FOR THE FAIR? RIGHT, OVER THERE. WELL, DON'T MAKE A BIG SONG AND DANCE ABOUT IT, JUST WORK ON IT LIKE YOU NORMALLY DO. THAT WAS REALLY GREAT. I FOUND IT HONEST.”

SIEGFRIED DÄMMICH,  
FORMER EMPLOYEE (1966–1992)

## INCREASING COMPETITIVENESS

Having just recovered from the effects of the 1973 oil price hike, the economic conditions deteriorate again in 1979 due to the second oil price shock.

The recession also reaches the material flow and warehousing equipment sector; competition becomes tougher. Jungheinrich also sticks to its proven strategy of high capital expenditures in this crisis and launches an innovation offensive. In the process, microelectronics opens up new opportunities in the area of automated material and warehousing technology – all of which would not be possible without barcodes. A **Yellow Moment!**

**“THE BARCODE WAS A BIG STEP FORWARD FOR AUTOMATION – NOW EMPLOYEES DIDN’T HAVE TO ENTER ANYTHING BY HAND: THEY COULD SWIPE THE GOODS AND USE THE BARCODE TO TRIGGER THE NEW ORDER.”**

BODO DENNSTEDT, FORMER EMPLOYEE (1988–2016)

### Pioneer in automated transport and warehouse systems

With the inductively steered “Ameise Teletrak”, the company introduces the automation of non-rail forklifts as early as 1978. Microprocessors allow data processing during the work process and connection to a central computer. An important step on the path to automated transport systems for a synchronised material and information flow and a prerequisite for rational storage and material flow organisation. Distribution logistics is becoming the most important factor for the market success of wholesalers, supermarket chains and industrial companies. Jungheinrich develops, for example, an inductively guided, computer-controlled Teletrak system for the automotive industry. Production and assembly become so mobile with the automated guided vehicles (AGVs) that the sequence of operations can be flexibly changed at any time.

Even today, 35 years later, goods are entered into the warehouse management system by barcode.



## THE BARCODE

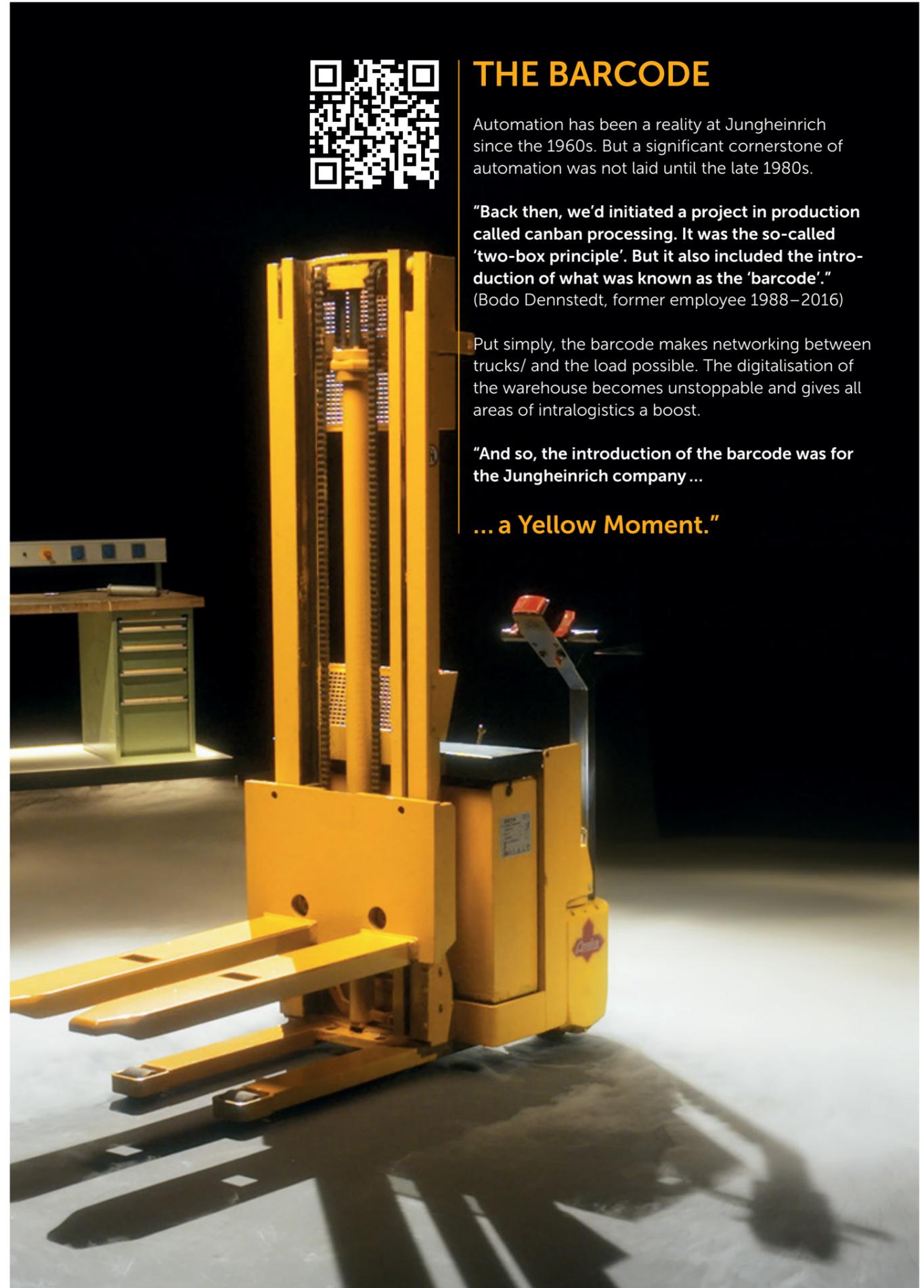
Automation has been a reality at Jungheinrich since the 1960s. But a significant cornerstone of automation was not laid until the late 1980s.

**“Back then, we’d initiated a project in production called canban processing. It was the so-called ‘two-box principle’. But it also included the introduction of what was known as the ‘barcode’.”**  
(Bodo Dennstedt, former employee 1988–2016)

Put simply, the barcode makes networking between trucks/ and the load possible. The digitalisation of the warehouse becomes unstoppable and gives all areas of intralogistics a boost.

**“And so, the introduction of the barcode was for the Jungheinrich company ...**

**... a Yellow Moment.”**



“THE BARCODE IS A BIG STEP FORWARD FOR AUTOMATION.”

BODO DENNSTEDT,  
FORMER EMPLOYEE (1988–2016)



plant. The new assembly plant enables Jungheinrich to respond much more flexibly to the changing requirements of the market: picking by order and production for a wide range of individual solutions. This is made possible by the innovative concept of “modular system development”, MSE for short, as well as the consistent conversion of series production to modular design. This means that more vehicle versions can be manufactured from fewer parts and assemblies.

Following the expansion of the Norderstedt plant site and the alignment of production to series production, Jungheinrich opens a new factory for special builds and small series in Lüneburg in 1989. The assembly of IC engine-powered trucks is also relocated from Wandsbek to Lüneburg. At the end of the 1980s, the Wandsbek plant increasingly develops into a site for material handling systems.

**Expansion of the sales and service organisation**

In the second half of the 1980s, Group management focuses on optimising the sales and service offering. The Jungheinrich rental fleet of new models grows steadily, while long-term equipment use through truck leasing provides another service. In addition, Jungheinrich offers a special rental package: long-term rental with full service and a guarantee of constant operational readiness at a fixed price. Furthermore, Jungheinrich sells used trucks that have previously been reconditioned in the subsidiaries’ workshops. Jungheinrich thus develops beyond the new truck business to become a strong and flexible partner for its customers.

Bodo Dennstedt,  
former employee (1988–2016)



Pioneer in automated forklifts. The challenge then as now: networking the vehicles in and with the warehouse.

In cooperation with the Fraunhofer Institute for Transport Technology and Goods Distribution, Jungheinrich develops the Automated Shelf Stacker System (ARS) at the start of the 1980s. The core components of the automated high-rack stackers are on-board computers linked to a warehouse management computer. With high throughput performance and lift heights of up to 15 metres, the ARS system opens up entirely new performance areas.

**New management, new plants, new production concepts**

On 1 April 1985, the personally liable partners Klaus Rosenkranz and Walter Gnauert leave the company. At the same time, the owner families move even closer to the company: Winfried Lange and Franz Günter Wolf, whose wives jointly hold the majority of the limited liability capital, join the holding company

as personally liable partners. In the course of this restructuring, a new general proxy is also appointed for Jungheinrich Unternehmensverwaltung KG: Frank Bär. He forms Jungheinrich’s management team together with Dr Eckart Kottkamp for the Technology area and Wolfgang Kiel for Sales.

They, too, continue to focus on technological progress and push ahead with the completion of the Norderstedt

## CONTINUITY AND CHANGE – JUNGHEINRICH BECOMES A PUBLIC LIMITED COMPANY

At the end of the 1980s Jungheinrich is in a good position: in 1987 it exceeds the sales mark of 1 billion Deutschmarks for the first time. In 1989, all plants in Germany and abroad are running at full capacity. Sales grow to just under 1.3 billion Deutschmarks.

Ultimately, the growth strategy leads Jungheinrich to open up to the capital market. In order to take the company public, the Lange and Wolf families convert the legal form of H. Jungheinrich Maschinenfabrik GmbH & Co. KG into a public limited company by shareholders' resolution of 20 June 1990 – a **Yellow Moment!**

**“BY GOING PUBLIC, WE WERE SUDDENLY SOMEBODY. JUNGHEINRICH WENT UP IN PEOPLE’S ESTEEM – EVERYTHING TOTALLY CHANGED.”**

KARIN MARTIN,  
FORMER CHIEF FINANCIAL OFFICER (1963–2000)

### Significant decisions

In 1990 Germany celebrates reunification; the “Iron Curtain” has fallen. There is a considerable pent-up demand for modern forklifts and warehousing technology in the new federal states and the former Eastern Bloc countries. As early as 3 October, Jungheinrich opens its

## GLOBAL PLAYER

Growth is one of Jungheinrich’s hallmarks. At the end of the 1980s, the growth strategy led Jungheinrich to open up to the capital market.

At a time when it is still unthinkable for women to sit on management boards Karin Martin is already organising Jungheinrich’s IPO as Chief Financial Officer: Jungheinrich becomes a public limited company.

**“We had a financial basis and foundation that was necessary for growth. And we have also seen confirmation that this was the best course of action.”** (Karin Martin, former Chief Financial Officer 1963–2000)

With the shareholders behind it, Jungheinrich grows steadily, becoming a global player and leading solution provider in intralogistics.

**“The IPO is clearly for me ...**

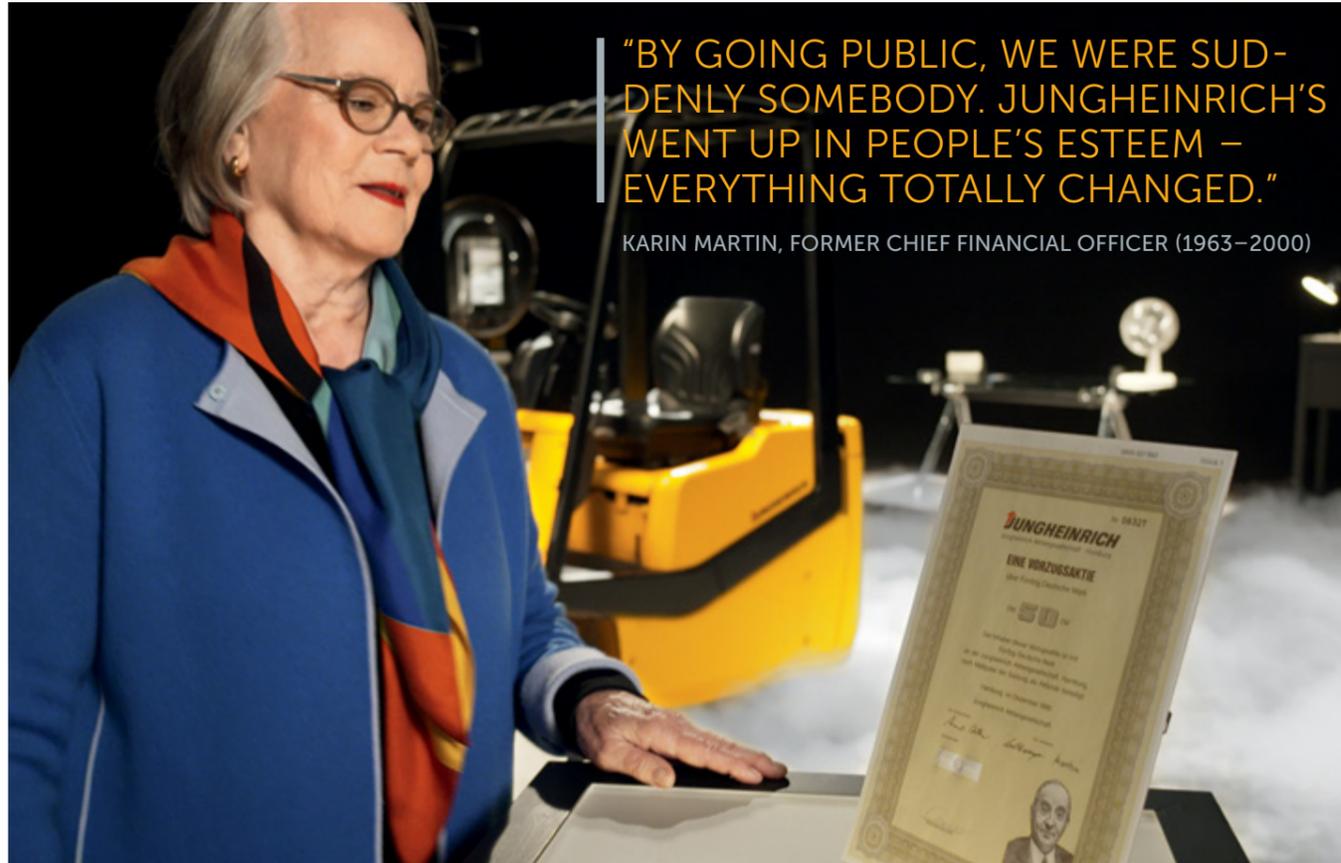
**... a Yellow Moment.”**



first subsidiary in the new federal states in Klipphausen near Dresden. For sales on the Eastern European markets, subsidiaries are founded in the Czech Republic and Hungary in 1992 and in Poland two years later. In 1993, a joint venture is launched with the competitor Linde, the JULI engine plant in Moravany near Brno in the Czech Republic.

In addition to this cooperation, the Group’s management reacts to the crisis and the further intensification of competition with targeted structural actions. For example, the company transforms its sales organisation in Germany into a two-tier system in distribution centres with associated subsidiaries. The after-sales area proves to be particularly stable in these times of

crisis: after the sale of a forklift, the after-sales service fosters long-term customer loyalty and thus also new truck business with its comprehensive service. With the ComFour concept, developed in 1994, the company combines financial services leasing, rental, hire purchase and part payment – an unrivalled concept.



**“BY GOING PUBLIC, WE WERE SUDDENLY SOMEBODY. JUNGHEINRICH’S WENT UP IN PEOPLE’S ESTEEM – EVERYTHING TOTALLY CHANGED.”**

KARIN MARTIN, FORMER CHIEF FINANCIAL OFFICER (1963–2000)

The Group’s stronger alignment with customer requirements and services puts the after-sales area as an independent business unit on the same level as production. The service department works closely with the development department to promote customer-oriented innovations.

Purchasing develops into strategic supplier management with the staff department Central Group Purchasing, which was introduced in 1997. The aim is to lower overall purchasing costs, to select preferred suppliers and bind them more closely to the Group, and to develop Group-wide standards for suppliers.

In parallel to the various internal reorganisation measures, the Group management continues to focus on expansion. The main focus is on the expansion of the Eastern European direct sales network.

In 1996, a subsidiary is founded in Slovakia, in 1997 in Slovenia. New foreign companies are also created in Western Europe with a Portuguese subsidiary in 1998. In addition, the focus increasingly shifts to the markets in the USA, South America and Asia. In 1998 Jungheinrich opens its first representative office in Singapore.

At the end of the 1990s, Jungheinrich is represented at over 40 locations worldwide. In 1998, the Group generates sales of almost 1.7 billion Deutschmarks outside Germany – this increases the share of foreign business in Group sales to 64 percent.

Three-phase AC pioneer: The EFG-VD is the first electric forklift with three-phase AC drive in 1996. With this drive, electrically powered forklifts attain handling rates that approach the level of diesel forklifts, yet in an environmentally friendly manner without emissions.

**The big coup**

Numerous technical inventions make 1994 the year of innovations. Apart from a product offensive in the forklifts business unit, the division of in-plant logistics also develops successfully. The new Jungheinrich data communication system significantly increases information processing in the warehouse and the handling performance of the customer’s forklift fleets.

There is a reason why 1994 becomes one of the most significant years for Jungheinrich in its development into an international engineering group: the acquisition of the British Boss Group including the traditional Bavarian company Steinbock. The Jungheinrich and Steinbock/Boss production programmes hardly overlap, but above all Jungheinrich extends its competences in IC engine-powered counterbalanced trucks. This makes Jungheinrich a full-range supplier – the best prerequisites for positioning itself even more strongly internationally in the industry in the future.

**Restructuring and product initiative**

More integration of the new subsidiaries and strategic realignment of the total group are now being driven forward. The programme: the “Jupiter” product initiative. The goal: to increase productivity across the Group in order to ultimately achieve cost and technology leadership in electric forklifts. To achieve this, production is consolidated at the individual sites. It is planned to lower manufacturing costs by increasing the number of units produced. Another part of the programme is the rejuvenation of the product range and the overhaul of numerous series. In 1997, the first diesel and LPG trucks designed by Jungheinrich leave the factory in Leighton Buzzard. This marks the company’s return to what is still the largest industrial truck segment after almost 40 years without IC-powered trucks designed and manufactured in-house and sees it ending its 14-year cooperation with the US manufacturer Yale.



## THE DAWN OF THE NEW MILLENNIUM

At the start of 2000, there is a rigorous continuation of the consolidation course that has already been embarked upon. The market presence of Jungheinrich direct sales is expanded with new foreign companies. The direct sales network now covers a total of 24 countries, 10 of them in Eastern and South-Eastern Europe – a unique selling point in the industry. The process of brand concentration is completed by the time the company celebrates its 50<sup>th</sup> anniversary in 2003. The Jungheinrich brand is repositioned worldwide under the slogan “Jungheinrich – it’s worth it”.

As part of the expansion of the profitable service and support business for forklifts, two modern logistics centres in Norderstedt and Lahr take over the supply of spare parts for Europe from 2002. This means that spare parts are available overnight throughout Europe for the first time. In 2004, the return of production to the German plants is also implemented to a large degree.

Another strategically important step is the expansion of the systems and project business. As a general contractor, Jungheinrich supports its customers with individual, holistic concepts and links racking systems and operating devices, automatic small part warehouses as well as various conveyor systems with precisely coordinated EDP management software to create a custom-fit, economical warehouse system.

**“WE ALWAYS TRY TO ANTICIPATE THINGS IN TECHNOLOGY DEVELOPMENT AND LOOK AT WHAT WILL HAPPEN IN TEN OR FIFTEEN YEARS. AND WE HAVE IDENTIFIED LI-ION TECHNOLOGY AS AN ENERGY STORAGE TECHNOLOGY WITH A LOT OF POTENTIAL.”**

MARTIN VON WERDER, GROUP MANAGER IN TECHNOLOGY DEVELOPMENT

World premiere: Hildegard Wolf and Ursula Lange at the presentation of the Concept 08 – a **Yellow Moment!**



## THE HUNCH

More as a hunch, one of the most innovative vehicles in the history of intralogistics was born in the 2000s.

**“We always try to anticipate things in technology development and look at what will happen in ten or fifteen years. And we have identified li-ion technology as an energy storage technology with a lot of potential. Initially on a very low burner, but we then started writing a technology report, fundamentally investigating the technology to bring lithium-ion technology into vehicles more and more progressively.”** (Martin von Werder, Group Manager in Technology Development)

The Concept 08 is the world’s first lithium-ion forklift, a ground-breaking technology.

Today, almost the entire industry relies on li-ion electric drives. Through pioneering work, Jungheinrich is also securing a head start here and creating sustainable value.

“So that was indeed ...

**... a Yellow Moment.”**



“I CAN REMEMBER THE DAY VERY WELL. BECAUSE WE APPEARED AT THE FAIR WITH THIS VEHICLE, WITH THE CONCEPT 08 VEHICLE, WE HAD BROUGHT SOMETHING COMPLETELY NEW (...)”

MARTIN VON WERDER, GROUP MANAGER  
IN TECHNOLOGY DEVELOPMENT



is also marked by another record turnover. At the same time, however, a global economic downturn sets in as the banking and financial crisis worsens – and does not spare the intralogistics sector, and Jungheinrich with it. The result is a massive slump in the market and a significant drop in orders.

The Group's management not only reacts to these underlying conditions with consistent cost management, but also with actions to strengthen the market position, intensified sales activities and targeted capital expenditures. Similarly, in view of this business situation, the shareholder families Lange and Wolf demonstrate their loyalty to the company by, among other things, foregoing a dividend distribution as ordinary shareholders.

In 2009, the production plant for electric pedestrian pallet trucks, conceived as a “Centre of Excellence”, is opened in Landsberg near Halle (Saale). By acquiring a stake in one of the leading software houses for warehouse management systems, the Austrian company ISA GmbH (Innovative Systemlösungen für Automation) in Graz, Jungheinrich extends its extensive experience in software and thus strengthens its market position in the area of increasingly complex logistics systems.

“(…) AND THEN WE STARTED TO PUT LITHIUM-ION TECHNOLOGY INTO THE VEHICLES.”

MARTIN VON WERDER, GROUP MANAGER  
IN TECHNOLOGY DEVELOPMENT

Pioneering technology: Franz Günter Wolf and Wolff Lange at the trade fair presentation of the first Concept 08 lithium-ion forklift.



**New markets and new standards**

From 2004, the structural adaptation of the sales organisation results in business unit managers being responsible for the areas of series products, project business, rental and used equipment, international key account management and service. The globally active sales units are divided into four regional areas, each with one person in charge. In 2006, the areas of Sales, Trading House ProfISHOP with catalogue business and online sales, and in 2010 the Dealer Sales Organisation will be added.

At the same time, the company is increasing the productivity of the plants in Norderstedt, Lüneburg and Moosburg and customising the production and assembly methods for the products.

In addition, the increased involvement in the used equipment trade leads to the founding of the Dresden Used Equipment Centre in 2006. All European Jungheinrich sales centres now deliver their equipment to Klipphausen near Dresden for reconditioning in order to meet the growing demand for used equipment, which is mainly returned from financing contracts.

In the same year, an assembly plant for fixed-aisle stacker cranes goes into operation in Qingpu near Shanghai, China, in order to supply the growing Asian market.

**Between financial crisis and recession**

In 2007, the Group turnover exceeds the record mark of 2 billion euros for the first time. The fiscal year 2008

## UNDER THE SIGN OF GROWTH AND SHAPING THE FUTURE

Thanks to these forward-looking actions, Jungheinrich returns to profitability as early as 2010 and consequently moves up to third place in the global ranking of forklift suppliers. Since then, Jungheinrich has remained among the top three in the intralogistics industry alongside Toyota and the Kion Group.

In product engineering, the focus for the future lies on energy-saving drive technology. Jungheinrich set new standards in energy efficiency as early as 2011 with the first production-ready electric pedestrian pallet truck with li-ion technology, type EJE 112i. Launched in 2012, the IC engine-powered counterbalance truck with hydrostatic drive also stands for high energy efficiency.

**“OUR YELLOW MOMENT WAS A VEHICLE CONCEPT THAT HAD NEVER EXISTED BEFORE (...)”**

NILS SANDER, HEAD OF NORDERSTEDT PLANT

### On course for growth – increasing capacities

To continue on the already successful path, the group strategy sets the lofty aim of “4/7” in 2013, with a projected increase in turnover to 4 billion euros by 2020. This requires annual growth of 7 per cent.

As a result of the consistent implementation of its strategy, Jungheinrich acquired, among others, the MIAS Group, the leading supplier of rack operating equipment and load handling products headquartered in Munich, in 2015 in order to expand its product range.

## THE PRESENTATION

In Norderstedt, a piece of pioneering work is created that will permanently change the development of forklifts.

The ETV 216i is the first truck with a fixed li-ion battery and revolutionises the construction and design of forklifts. Today, the ETV forms the basis for the POWERLINE and all lithium-ion powered forklifts.

**“... and then presenting it to the global public, I will never forget it.” (Nils Sander, Head of Norderstedt Plant)**

### A Yellow Moment.



In 2013, Jungheinrich has its own sales and service firms in 39 different nations thanks to the ongoing development of new markets. And this success is also reflected on the financial market: on 4 December 2014, Jungheinrich AG was included in the MDAX, the index listing the 50 largest listed companies below the DAX in Germany.

The strong growth course requires corresponding capacities, which Jungheinrich then increases in all areas. Two new production sites are opened in 2013. One plant in Qingpu, China, for the Asian market; and another is created in Degernpoint, Bavaria. The Moosburg plant in the immediate vicinity is restructured in the course of this, resulting in a leap in productivity in production.

In 2017, Jungheinrich and its sales partner for the USA, Canada and Mexico, MCFA (Mitsubishi Caterpillar Forklift America Inc.), founded the joint venture “ICOTEX” (Industrial Components of Texas, LLC), which will from now produce forklifts and industrial components for the American market.

The supply of spare parts is also customised for the tasks ahead. In 2013, a state-of-the-art spare parts centre is in operation in Kaltenkirchen, Schleswig-Holstein. The supply of spare parts is also further expanded in the Asia-Pacific region – a Jungheinrich regional warehouse for spare parts opens in Shanghai in 2016.

The Jungheinrich Training Centre opens in September 2015. This is a response to the rising number of employees, more complex technology and the company's increasingly global presence. On an area of almost 8,000 square metres on the factory premises in Norderstedt, modern equipped training rooms and a large location for working and learning on trucks and racks of all Jungheinrich lines are created. Up to 5,000 participants can get qualified here every year.

In Hamburg-Wandsbek, more than 500 employees move into the new corporate headquarters at the long-established Jungheinrich site at Friedrich-Ebert-Damm 129 in December 2015. The next construction project starts just a short time later: premises almost identical in their construction are erected next to the building to accommodate more employees at the site.



A piece of pioneering work is created in Norderstedt and unveiled at LogiMAT on 13 March 2018. A bombshell!

**Born electric – the new standard**

The **Yellow Moment**, the development and presentation of the ETV 216i moving mast reach truck is the starting signal for another success story that cements Jungheinrich as an innovation driver in the industry. In the completely new concept, the truck is no longer built around a battery, as is usually the case, but rather the Battery is a fixed component.

The smaller scale sets new standards in efficiency and body design, a basis for the development of further product innovations: the Jungheinrich POWERLiNE. The ERD 220i, ERC 214/216zi and ERE 225i are more compact, safer, more comfortable and more efficient than their predecessors and competitors. Above all, however, they are particularly sustainable. From production to delivery to the customer, all POWERLiNE vehicles are completely carbon-neutral.

100% electric. POWERLiNE.  
We are a leading supplier in lithium-ion technology.



“WOW, THAT WAS A GREAT MOMENT, IT WAS INSANE.”

NILS SANDER, HEAD OF NORDERSTEDT PLANT

## READY FOR THE FUTURE

### Long-term, profitable growth

**Yellow Moments** have been driving Jungheinrich for over 70 years, resulting in being one of the world's leading intralogistics solution providers today. As a family-owned company, Jungheinrich has a corporate structure and strategy with a long-term focus that provide the necessary backing and strength to take advantage of market opportunities and grow profitably and successfully in the long term. The 2025+ strategy focuses on automation, digitalisation, energy systems, efficiency, sustainability and the global footprint.

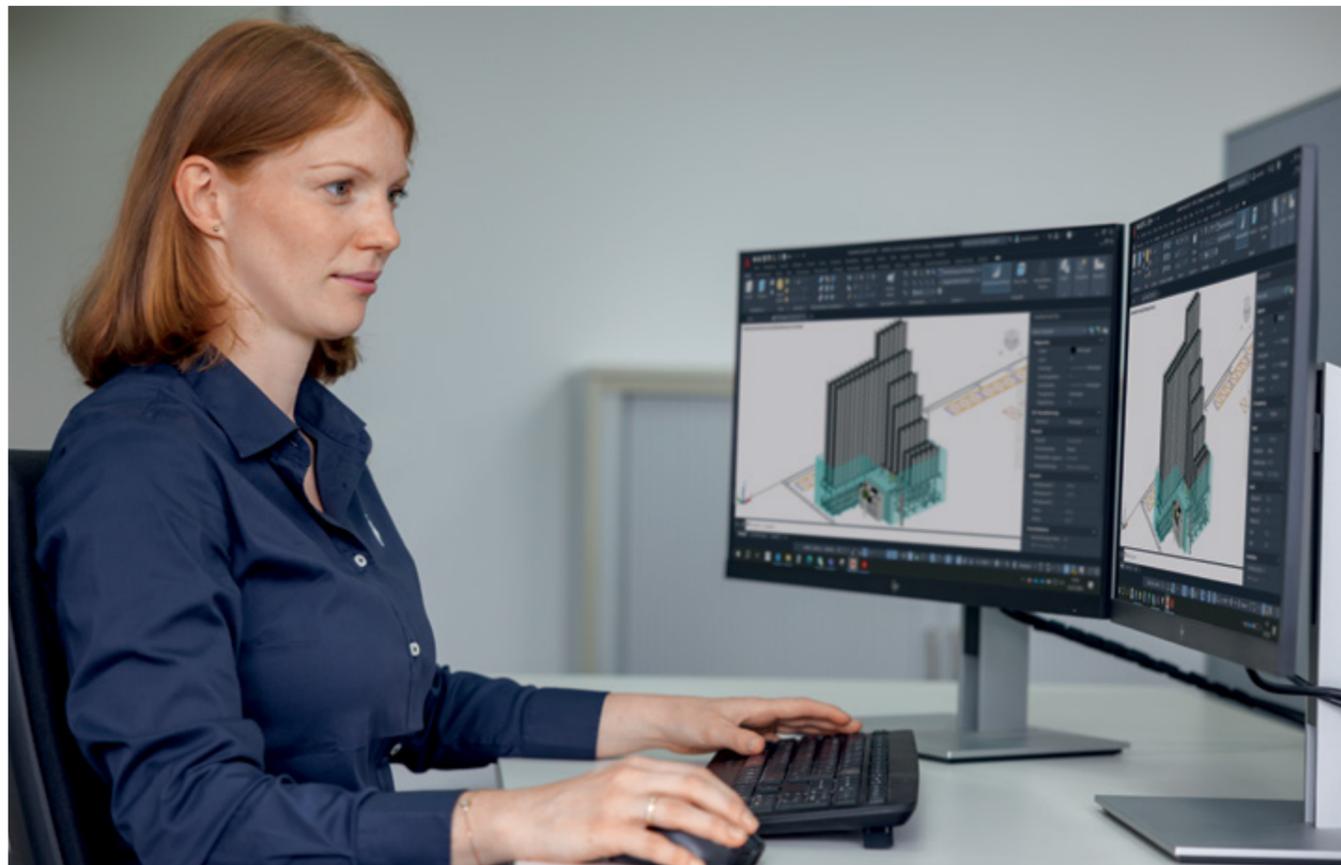
### New markets and business segments

Jungheinrich is continuously extending its geographical presence in key growth markets such as the Asia-Pacific region and North America through strategic partnerships and targeted acquisitions. This strategically stabilises and expands its global footprint and technological expertise. New sales units are being established in New Zealand and Serbia. By 2023, Jungheinrich will be represented in 42 countries by its own direct sales companies and by partner companies in some 80 countries.

**"THE NEW DIMENSION IN EFFICIENCY: WITH THE POWERCUBE, WE ARE SETTING NEW STANDARDS IN THE AREA OF AUTOMATED WAREHOUSE SYSTEMS."**

LENA KRESSIRER, TECHNICAL DRAUGHTSWOMAN

The PowerCube automated compact container storage system is scalable to any customer requirement: Layout creation by Lena Kressirer, technical draughtswoman, Moosburg.



## WE DESIGN THE WAREHOUSE OF THE FUTURE

**As one of the world's leading intralogistics solution providers, Jungheinrich has been driving the development of innovative and sustainable products and solutions for material flow for 70 years.**

From hand pallet trucks to POWERLINE, AMR (Autonomous Mobile Robots) and the automated, ultra-compact and scalable PowerCube: as a complete solution provider, Jungheinrich offers a comprehensive portfolio of intralogistics products and services.

Jungheinrich will continue to play a role in shaping the future of intralogistics. The 2025+ strategy is aimed not only at profitability and growth, but also at automation, digitalisation, energy efficiency and sustainability. The global footprint and technological expertise will be further expanded through strategic partnerships and targeted acquisitions.

**70 years of Yellow Moments**



Jungheinrich's Mobile Robot portfolio is continuously being expanded with the aim of automating our customers' end-to-end processes in the warehouse.

A plant for new trucks is being created in Chomutov (Czech Republic) and a plant for reconditioning used equipment in Ploiești (Romania). The global supply of spare parts is being expanded with new spare parts warehouses in Bratislava (Slovakia) and Singapore. An installation is being set up in Zagreb (Croatia).

In addition, Jungheinrich is continuously expanding divisions by acquiring stakes in companies. Jungheinrich has held shares in the robotics start-up Magazino since 2020. The acquisitions of Arculus and the Storage Solutions Group in 2021 and 2023 will create strategic platforms for further growth, especially in the areas of mobile robots and automation.

**Complete solution provider – expansion of the portfolio**

Jungheinrich offers its customers a comprehensive portfolio of intralogistics products and services from a single source. And portfolio and integrated intralogistics solutions are constantly being expanded. With the POWERLINE, the company produces and sells the most modern manual electric forklifts in the world.

These lithium-ion integrated trucks are characterised by smaller dimensions, greater manoeuvrability and health and safety, as well as higher performance than any conventional truck in their class. And the success speaks for itself: in 2019, the ETV 216i wins the IFOY Award, and in 2022, the ERD 220i is another POWERLINE vehicle to be named "International Forklift of the Year" (IFOY). One very special milestone is the delivery of the 100,000<sup>th</sup> lithium-ion truck in 2022.

**"100 % ELECTRIC! EVERYONE IS TALKING ABOUT THE 'END OF INTERNAL-COMBUSTION VEHICLES' – JUNGHEINRICH IS LIVING IT: ON 13 MARCH 2023, THE LAST IC-POWERED VEHICLE WILL ROLL OFF THE ASSEMBLY LINE IN MOOSBURG."**

DR LARS BRZOSKA, CHAIRMAN OF THE EXECUTIVE BOARD

The rapidly growing segment of mobile robots (Automated Guided Vehicles – AGV, Autonomous Mobile Robots – AMR) in the area of automation is also being continuously extended, for example in 2021 with the new EKS 215a for high-lift applications or the arculee S for under-ride transport. One trade fair highlight was the new EAE 212a, an autonomous solution for flexible floor-to-ground transport. With a steadily growing number of Automated Guided Vehicle System as well as automated goods flow and software solutions, Jungheinrich is once again consolidating its reputation as an innovator in the industry.

The PowerCube, which will receive its world premiere at LogiMAT 2022, sets new standards. The automated compact warehouse systems enable particularly space-efficient container storage in a very small area. Thanks

to the modular design of the warehouse systems, which are up to 12 metres high, the PowerCube can also be adapted to individual storage shapes, is scalable and, with fully automated 24/7 operation, is a big step towards the warehouse of the future. The PowerCube is a high-performance solution in the fast-growing market of Ultra High Density Storage Systems. It is attracting enormous customer interest at the most important European trade fair, LogiMAT, in April 2023. The first projects have already been won.

In addition to new trucks and systems, Jungheinrich also offers a comprehensive range of used equipment, rental solutions for short and long-term hire as well as financial services. In its anniversary year, the company has a worldwide service network with more than 6,000 service engineers who ensure smooth material flow in the warehouse.

**"AT LEAST ONE IN TEN FORKLIFTS WILL BE A MOBILE ROBOT BY 2030. WE WANT TO CONTINUE TO PROVIDE OUR CUSTOMERS WITH YELLOW CONFIGURATIONS."**

MANUELA SCHMIDBAUER, PRODUCT MANAGER MOBILE ROBOTS

**"Write the Future" – Manuela Schmidbauer, Product Manager Mobile Robots, explains the Jungheinrich mobile robot solution, consisting of the EAE 212a with autonomy features and the MRC control system with control centre and toolchain for the users.**



**Digital safety and global networking**

As digitalisation progresses, IT safety is also becoming increasingly important. Jungheinrich is certified in accordance with ISO 27001 and TISAX and regularly reviews cyber security, both internally and externally. The new IT plant in Frankfurt enables real-time digital collaboration with customers and partners. A new fleet management system with improved safety features will digitally connect over 400,000 vehicles by 2025.

**Digital transformation for efficient processes and structures**

In the course of these optimisations, a new programme for digital end-to-end processes is being implemented: the DEEP programme. It ensures customer-centric, automated processes and optimised data structures in a modern IT architecture and thus enables an annual productivity increase in the double-digit millions.

**Crisis management and resilience**

Since 2020, the global COVID-19 pandemic has confronted most people with unprecedented challenges and profound changes in both their private and working lives. For Jungheinrich as an employer, protecting the health of its employees – in addition to ensuring delivery capability – has top priority in this permanent “state of emergency”.

Assessments by the crisis team enable a rapid and appropriate response to all current developments. Even at the height of the Covid crisis and during the war in Ukraine, the supply chain management always safeguards the production and delivery capability. As a result, these crises can be successfully navigated from an economic perspective.

In recent years, Jungheinrich has repeatedly proven itself to be particularly crisis-resistant. In addition to its high earnings and financial strength, it is above all its customer structure and a business model with strong pillars in the areas of after-sales and financial services that form its backbone, especially in economically challenging times.

**STRATEGY 2025+**

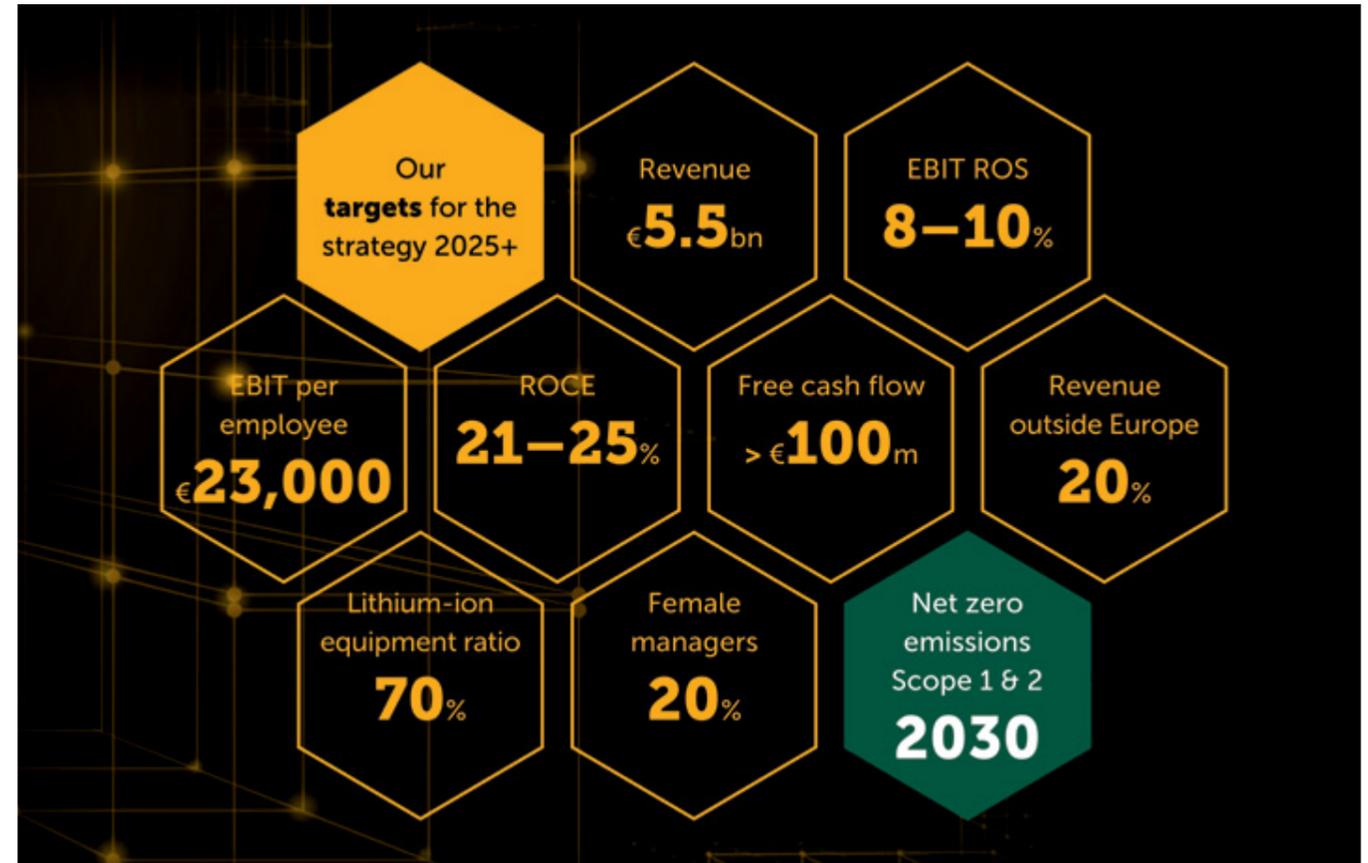
**Creating sustainable value**

With the goal of creating sustainable value for all stakeholders, we have been consistently implementing our corporate strategy 2025+ since autumn 2020. The core of this strategy is to focus even more on our customers while significantly increasing our profitability and efficiency. Within the framework of six fields of action – automation, digitalisation, energy systems, efficiency, global footprint and sustainability – we have initiated, further developed and implemented a large number of projects worldwide that contribute to our corporate success.

**Sustainability and responsibility**

As a key field of action in its Strategy 2025+, Jungheinrich has reinforced its actions to implement sustainability – both economic and environmental – in all its forms. Since February 2021, all German plants and sites have been powered exclusively by 100-percent green electricity. The sites in Spain, Hungary and Denmark already obtain electricity from renewable sources. In the UK, Norway and the Netherlands, projects are underway for the conversion to a CO<sub>2</sub>-neutral service, including the started conversion of the service vehicles to electric drive systems.

These and many other actions already implemented are recognised and acknowledged internationally: in 2022 and 2023, Jungheinrich was awarded EcoVadis Platinum certification twice in a row, which identifies the company as part of the ‘Top 1%’ of the most sustainable companies worldwide. By combining sustainable projects, ways of thinking and working, this pioneering role is planned to be further expanded and inspire many more companies.



**“We’re the Intralogistics Pioneers”**

For 70 years, Jungheinrich has been filled with pioneering spirit and innovative strength. In 2021, Jungheinrich won Nico Rosberg as its brand ambassador. Rosberg is co-founder of the sustainable technology platform Greentech Festivals, which advocates an electrified and decarbonised economy. To strengthen the company’s external perception and draw more attention to its diverse product solutions, the brand campaign “We’re the Intralogistics Pioneers” will be launched in 2022. This clearly positions Jungheinrich as a strong global player in automation, e-mobility and sustainability. With the commitment of its employees, who carry the brand promise to the outside world, Jungheinrich will continue to play a significant role in shaping the industry as an intralogistics pioneer ...

... and creating even more **Yellow Moments**.

**“WE ARE TAKING RESPONSIBILITY FOR FUTURE GENERATIONS AND MAKE OUR CONTRIBUTION TO SOCIETY.”**

DR LARS BRZOSKA,  
CHAIRMAN OF THE BOARD OF MANAGEMENT

