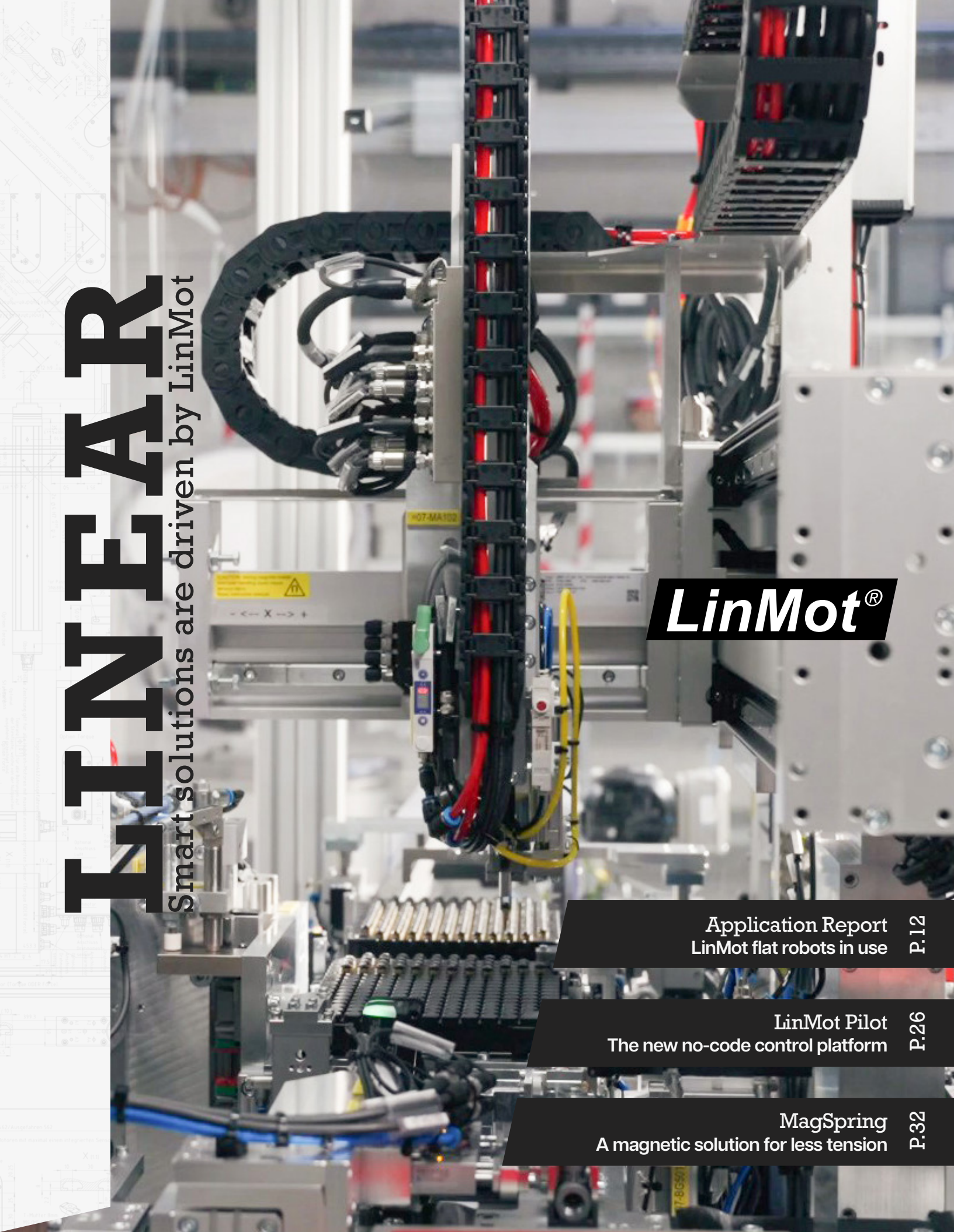
LINEAR

Smart solutions are driven by LinMot



LinMot®

what's inside

Success stories / Products / Facts
from the world of linear motion

Dear Readers,

Automation thrives on movement. On speed. On precision. On ideas that go beyond simply running linear. That is exactly what we at LinMot stand for – and exactly what we want to share with you in this issue of LINEAR.

Our new Flat Robots demonstrate how compact and yet powerful automation can be. With our new stainless steel solutions, we set new standards in clean environments – robust, safe, and reliable. And with LinMot Pilot, we have created a tool that makes configuration and commissioning so intuitive that high-tech suddenly feels almost playful.

But technology is only half the story. The other half is you. Your ideas, your challenges, your pace. Because every innovation we develop has one clear purpose: to give you more freedom and safety in automation. More room to think creatively. More dynamics to push boundaries.

This is how a linear movement becomes something greater: a shared journey into the future. Welcome to the new edition of LINEAR and welcome to a world where automation knows no limits.

The Editorial Team

Imprint

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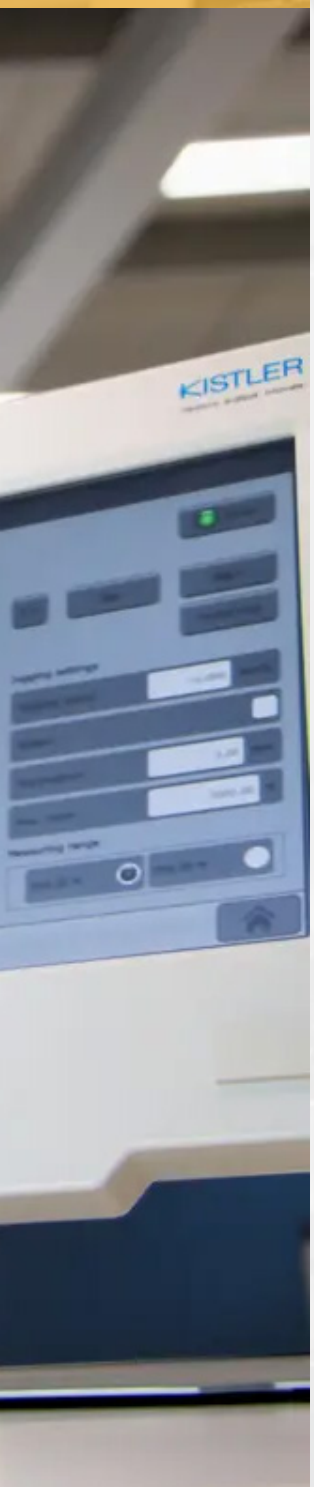
Strong partners Strong performance

Kistler is the global leader in dynamic measurement technology for pressure, force, torque, and acceleration. As an experienced development partner, the globally active company enables customers from industry and research to optimize products and processes – and to gain sustainable competitive advantages.

Kistler combines LinMot linear modules with piezoelectric measurement technology for precise joining with high dynamics

With its innovative joining system NCFQ 2166A, Kistler combines the high dynamics of LinMot linear modules with the precision of piezoelectric sensors. The result is a complete system that unites the strengths of both technologies and sets new benchmarks for precise, dynamic joining. Thanks to optional acceleration compensation, it is perfectly suited for applications requiring the highest levels of quality and speed – such as in the production of medical and electronic devices, semiconductors, or in the automotive industry.



LinMot®

KISTLER

measure. analyze. innovate.

In the production of insulin pens, precision and efficiency are equally essential. The NCFQ joining system in combination with LinMot's DM03 linear module (see image on the left) brings both together. The compact drive impresses with its optimized moving mass, outstanding dynamics, and accelerations exceeding 50 m/s².

Perfect for medical devices

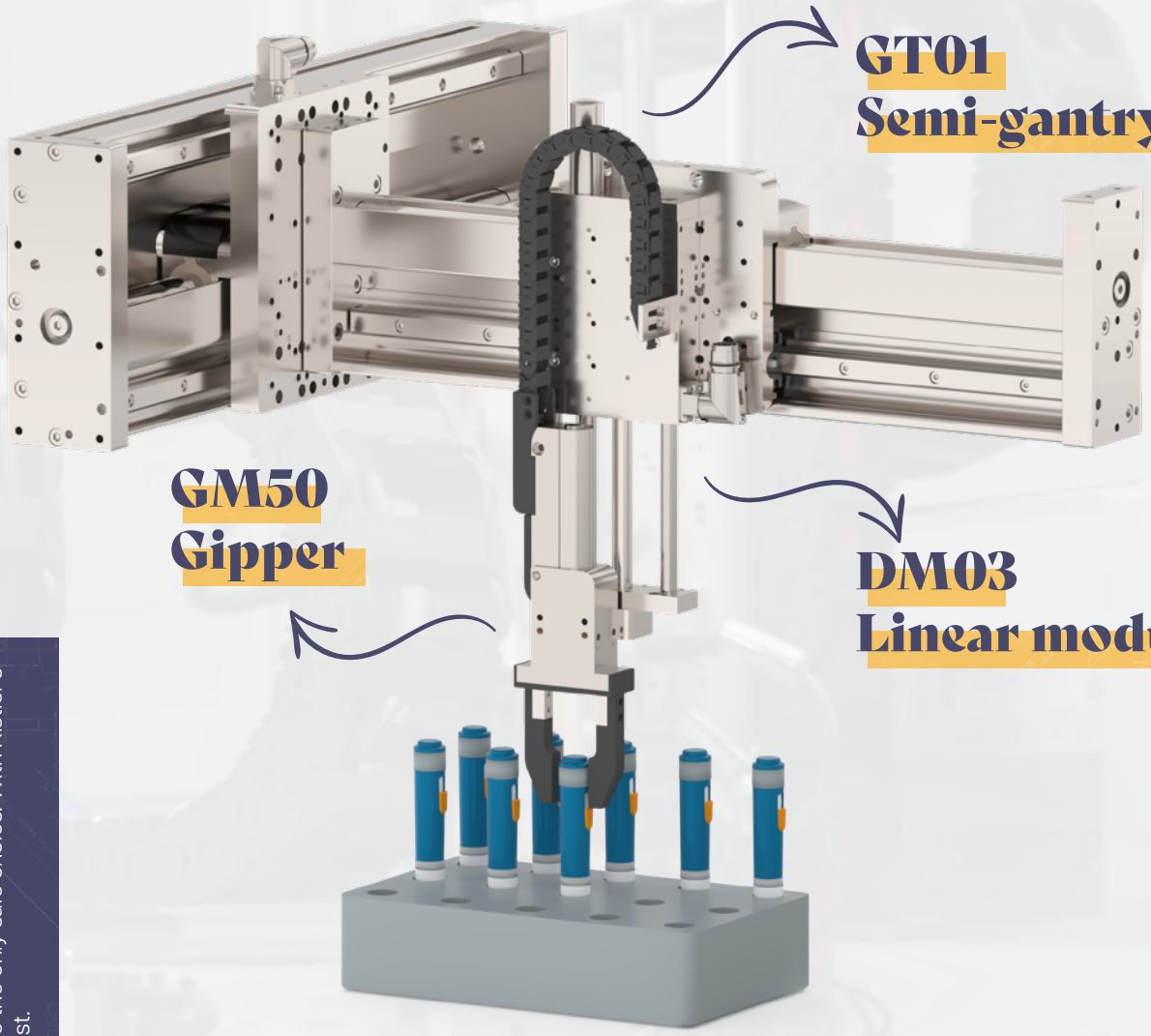
Highly dynamic applications with forces up to 500 N – such as in the production of autoinjectors or insulin pens – benefit especially from the new high-speed joining system NCFQ. The sensor-based system also shows its strengths in electronics manufacturing, for example in relay or haptic testing. The joining module, equipped with an integrated LinMot DM03 linear module, achieves accelerations of up to 50 m/s² and speeds of up to 5 m/s. In addition, the linear module features an integrated MagSpring, which enables precise weight compensation in vertical installation.

[1] Source: Kistler Group press release, Winterthur, September 2025.
[2] High-speed joining system NCFQ 2166A: joining technology with a unique operating principle – patent pending.

Focus on pharma

The systems are already in use at pharmaceutical manufacturers. In one production line for insulin pens, for example, the insulin cartridge is automatically inserted into the plastic housing of the autoinjector and then pressed in precisely by the NCFQ joining system. Here, absolute precision is key: if the force is too low, the parts are not joined reliably; if it's too high, the cartridge could be damaged and insulin might leak out. Thanks to the reliable measurement and joining technology and the high-speed LinMot linear module, the manufacturer can rely on flawless performance even with cycle times as short as 500 milliseconds – and eliminate production errors altogether.

All Photos: © Kistler Gruppe



Until now, users often had to choose: maximum precision and process monitoring, or maximum speed. In many applications where reliability and quality are critical, the slower option used to be the only safe choice. With Kistler's new high-speed NCFQ joining system, those compromises are a thing of the past.

Whether for assembling injectors, filling cartridges, or carrying out precise testing and dosing processes – LinMot drives deliver not only technical precision but also the process stability required for the production of safe, high-quality medical devices. Discover more of our solutions for the pharmaceutical industry.

Stainless steel products

LinMot stainless steel actuators offer maximum hygiene and are ideal for use in the pharmaceutical, chemical, and food industries.

Our new Products

PR02-52 SSCH
Stainless steel linear rotary motor

We now also offer our proven PR02 linear rotary motor in a hygienic stainless steel design for use in the chemical, pharmaceutical and food industries. This makes the PR02 even more versatile, resistant to cleaning agents and easy to maintain.

PP13
Stainless steel pick-and-place module

The PP13 is a stainless steel pick-and-place system incorporating an innovative cable management solution. The stainless steel construction makes it particularly well-suited to applications in the food, pharmaceutical and packaging industries.

SM01-23 SSCP
Stainless steel linear guide

The new stainless steel linear module offers maximum hygiene in a compact design. With IP69 protection and excellent resistance to aggressive cleaning processes, it has been designed with washdown suitability in mind, making it the ideal solution for the food and pharmaceutical industries.

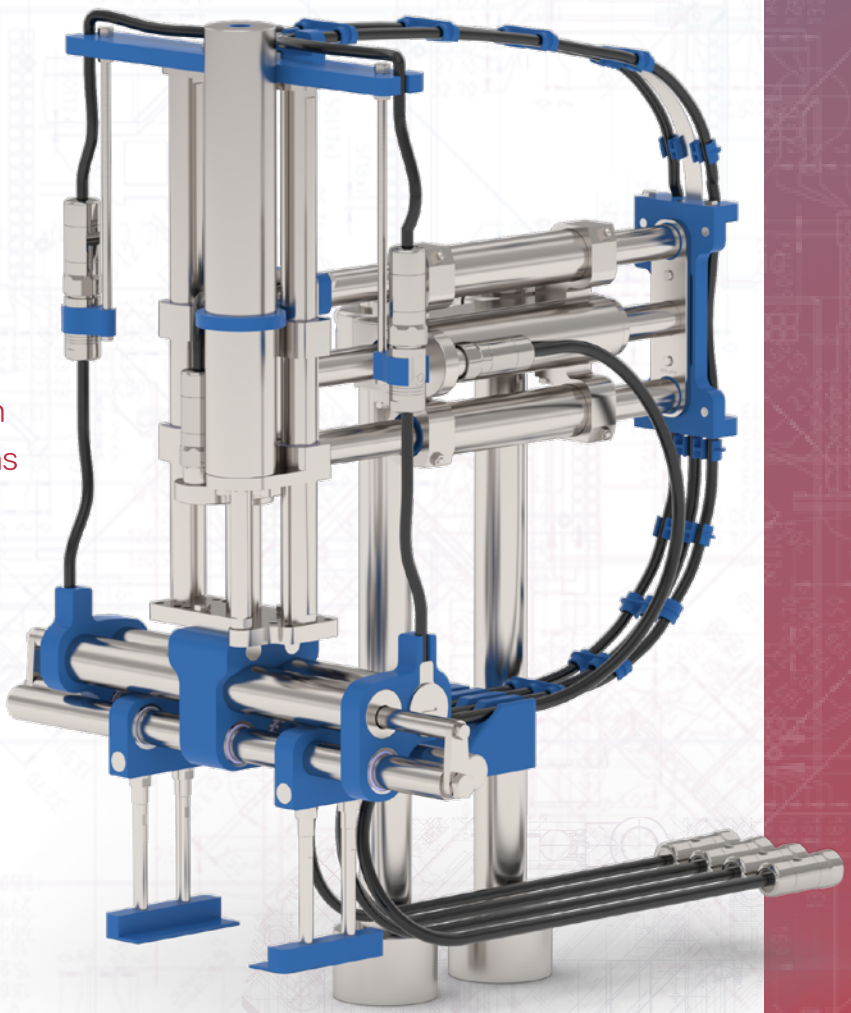
Visit our website at
linmot.com

PR02 Stainless steel Linear rotary motor

- Resistant to cleaning agents
- Designed for use with all types of food
- Developed for use in the chemical industry
- The motor housing and the shaft are made entirely of 1.4404/316L stainless steel

PP13 Stainless steel pick & place

- Each axle is made of stainless steel
- Integrated cable management as an option
- Modular design with different stroke lengths
- Perfect combination with the GM01 stainless steel gripper



SM01 Stainless steel linear guide

- Reliable corrosion resistance
- Washdown-safe for production
- Hygienic design with IP69 protection
- Optional integrated MagSpring for vertical applications

LinMot GmbH

Our team in Germany introduces itself

As the German subsidiary, LinMot GmbH is an established local partner for high-quality linear motor solutions on the German market. With its headquarters in Essen and the newly opened sales office in Burgoberbach near Ansbach in 2024, LinMot is now even closer to its customers. The goal of this expansion is to further strengthen personal support and technical assistance and to provide customers throughout Germany with the best possible service.

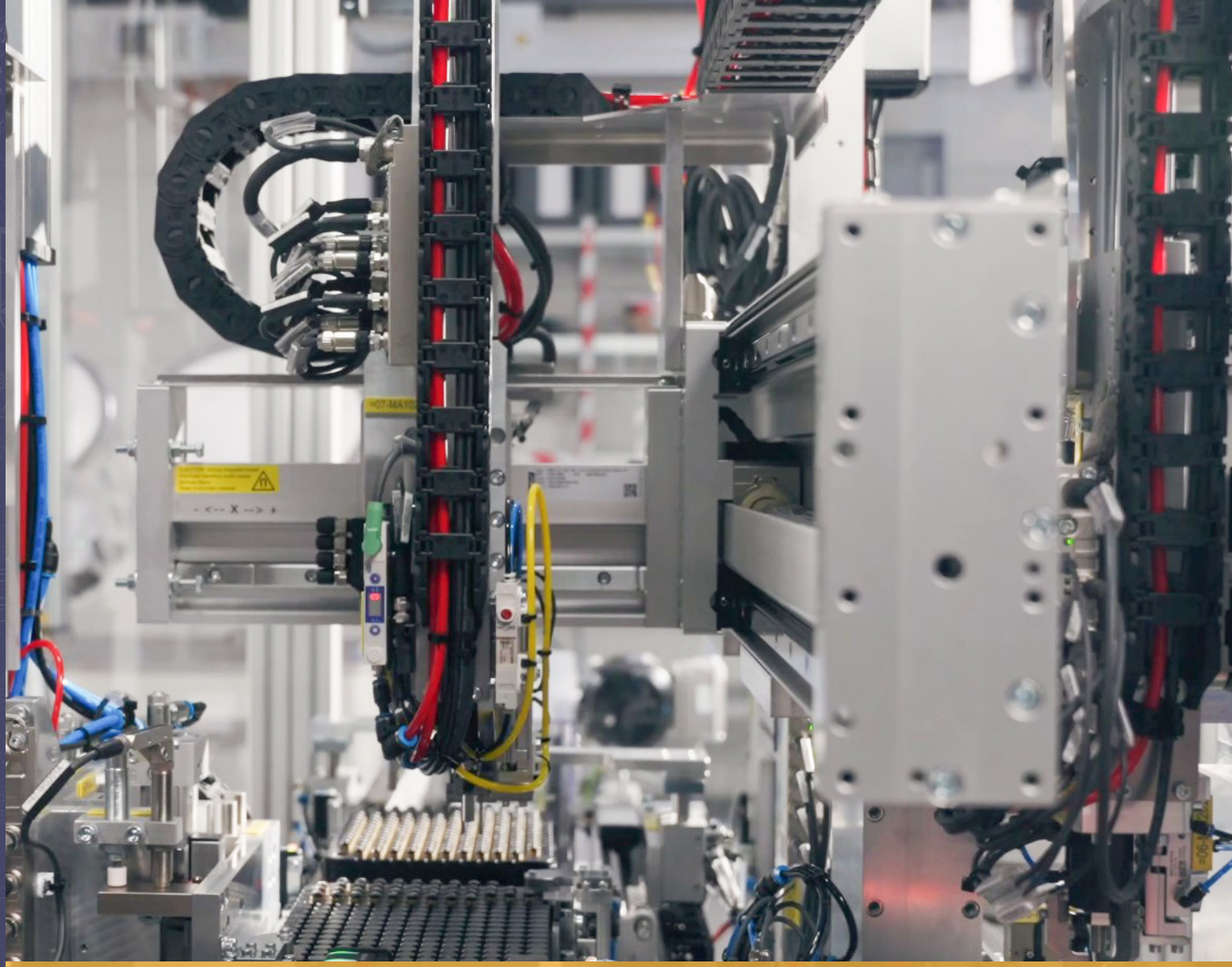
Both locations bring together key functions such as engineering, order processing, accounting, claims and repair service, as well as management. They are supported by a nationwide team of sales engineers who work every day with dedication and technical expertise to serve our customers. The steady growth of recent years is also reflected in the numbers: today, LinMot GmbH already employs 20 people – and the trend is rising. That success is celebrated each year at the company's summer party, where team spirit, good vibes, and of course great food take center stage.

Your partner for industrial linear motor systems in Germany

Under the motto “The application is the challenge,” our technical and sales teams work closely with customers to develop tailored solutions – often pushing the limits of what is physically possible. Managing Director **Marc Brugger** is particularly proud of his team: “With dedication, expertise, and mutual support, we find the right solution for almost any customer application.”

But LinMot goes one step further: from thefirst concept and order processing to commissioning and long-term product support, the customer is always at the center of everything we do.Our service department has earned an excellent reputation over the years – confirmed by regular customer surveys and many long-standing partnerships.

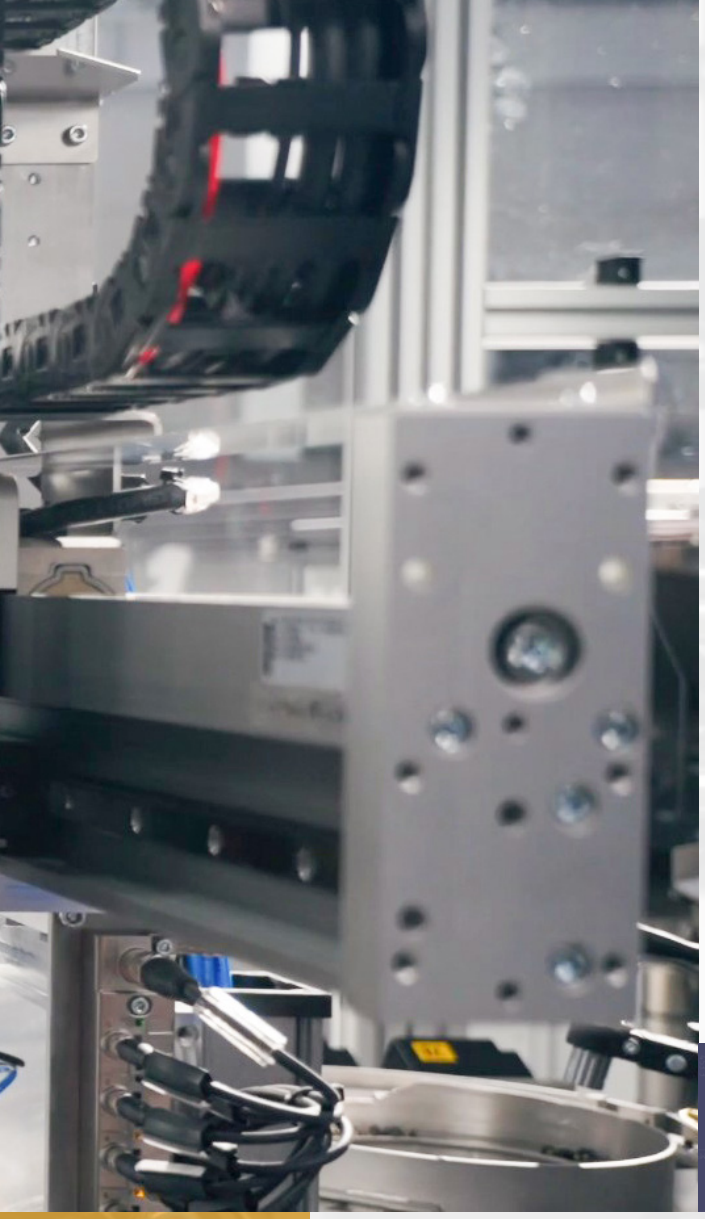
Despite the current challenges in the market, LinMot looks to the future with confidence. With a well-thought-out system approach, proven components, and a passionate team, the company is perfectly positioned to continue celebrating success together with its customers in the years ahead.



LinMot
Flat Robots und Systems

The demands on modern automation solutions are continuously increasing: ever more compact machine layouts, higher cycle rates, and maximum process reliability meet a growing variety of applications. With the new Flat Robots and Systems, LinMot provides the perfect answer – a consistently modular system concept that enables application-specific multi-axis systems to be implemented quickly, space-savingly, and precisely tailored to each process. From single axes to scalable complete systems, our Flat Robots are as versatile as the requirements of tomorrow.

An application report with TEAM Automation Berlin

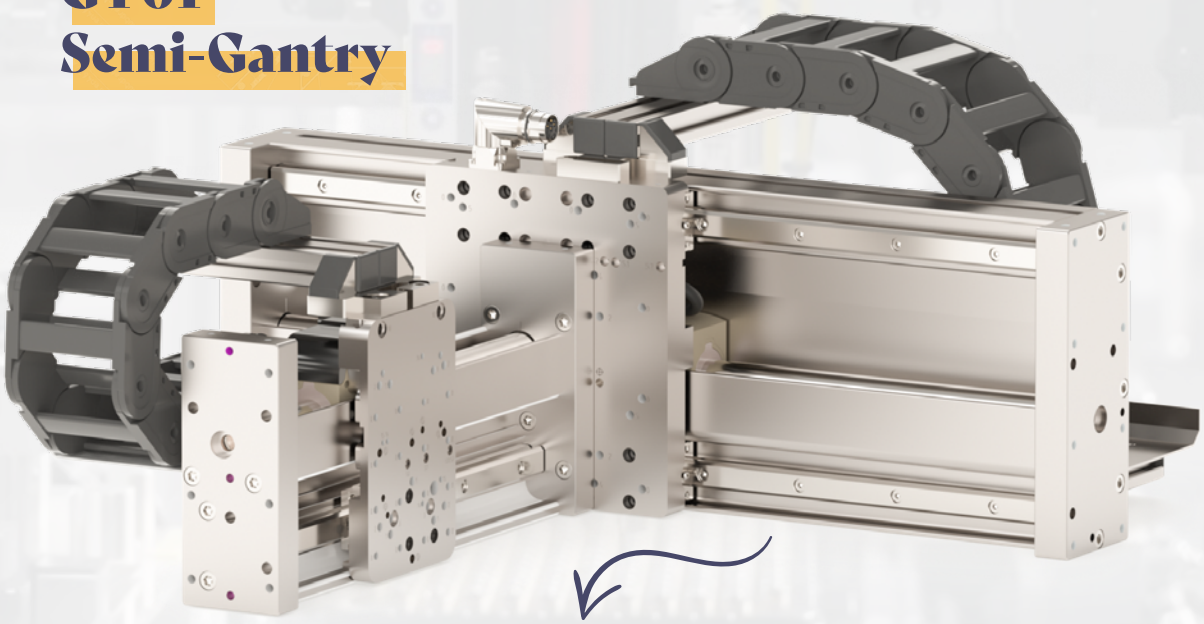


As versatile as tomorrow's requirements

The global market for linear drives is currently experiencing remarkable growth. In particular, the demand for electric linear drives has increased significantly in recent years – a trend confirmed by numerous studies and market analyses. The reasons for this dynamic growth are manifold: higher energy efficiency, improved controllability, easy integration into digital systems, and not least, greater sustainability compared to pneumatic solutions. But are the available solutions really as comprehensive as they appear at first glance?

To meet complex production requirements, safety regulations and sustainable processes, LinMot's space-efficient flat robots and systems provide innovative, highly dynamic solutions that can be tailored to individual customer applications in all areas of automation.

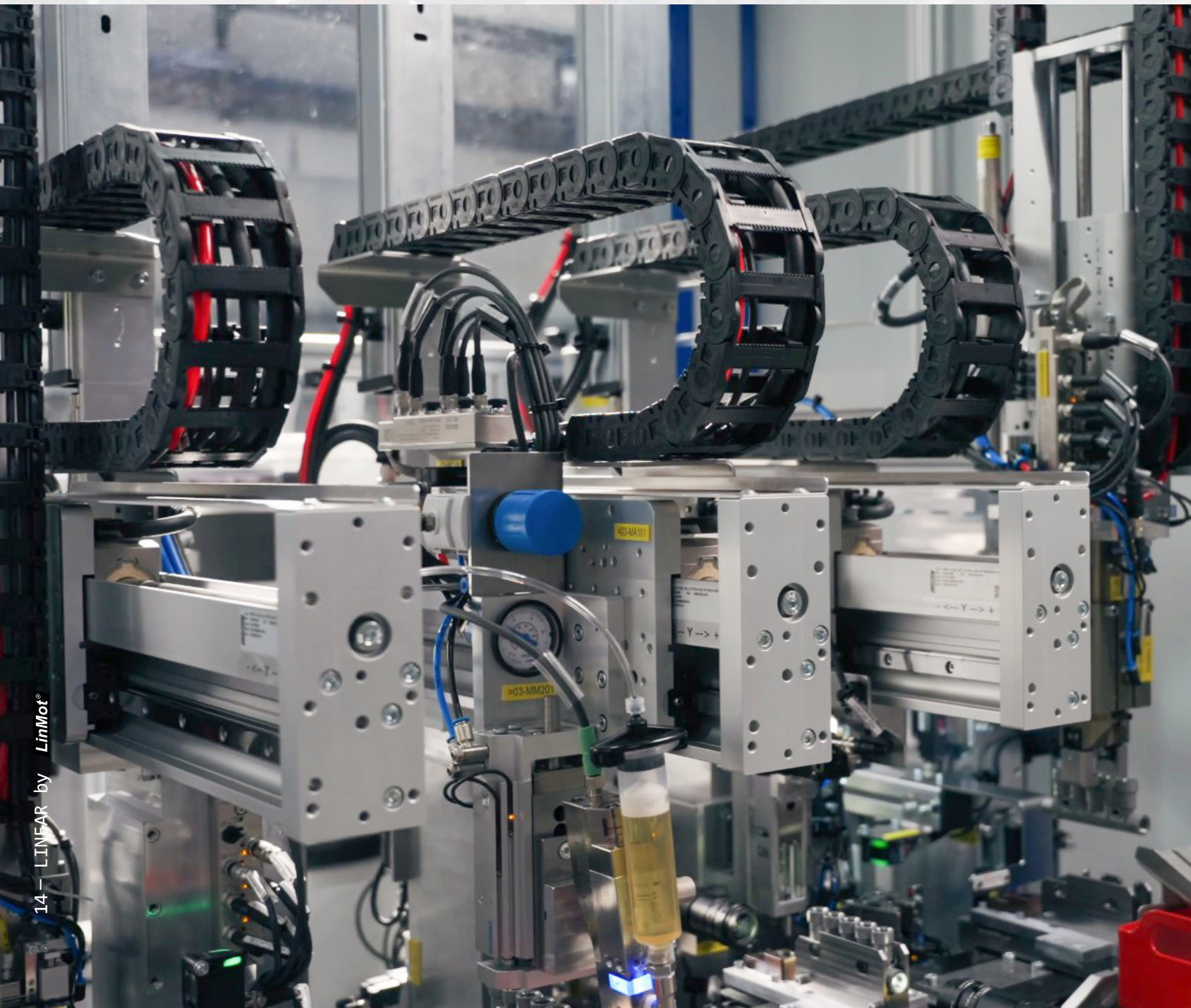
GT01 Semi-Gantry



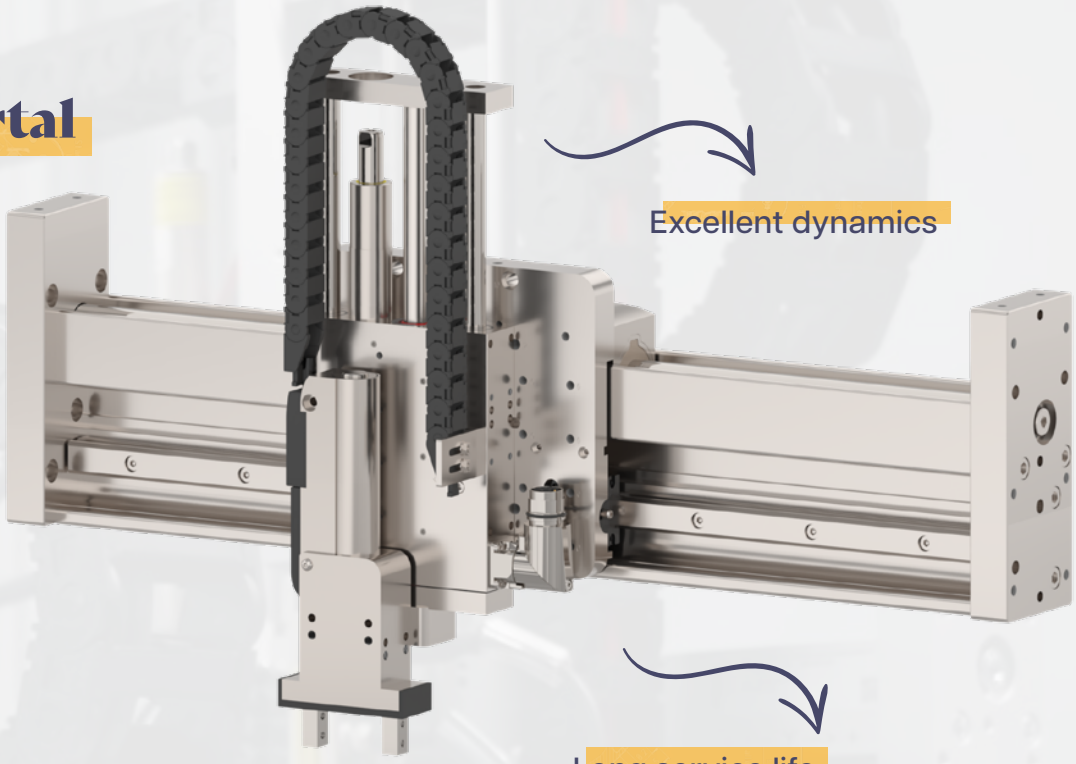
Small footprint thanks to slim design

Less mass – more class

As impressive as the market figures may be, in practice many drive systems quickly reach their limits. A survey by the PW Consulting Automotive & Machinery Research Center shows that 52% of integrators complain about the lack of modularly integrated guides or sensors – and the resulting high degree of customization required. And not without reason: the absence of standardized mounting options alone makes numerous customer-specific components necessary. As the Research Center further reports, this leads to setup costs in production lines – for example in medical device manufacturing – of up to USD 1,800 per axis. This is precisely where LinMot comes in: with solutions that, thanks to the standardized modular design of the drive elements, significantly reduce the effort required by machine builders.



TP03 Transferportal



Excellent dynamics

Fully assembled and ready-to-use

Long service life

LinMot Flat Robots and Systems are ready for immediate use. They combine proven structures, such as gantry, semi-gantry or other multi-axis systems, and are made up of LinMot linear motors, modules, guides and grippers. This enables industry- and customer-specific requirements to be implemented quickly and precisely.

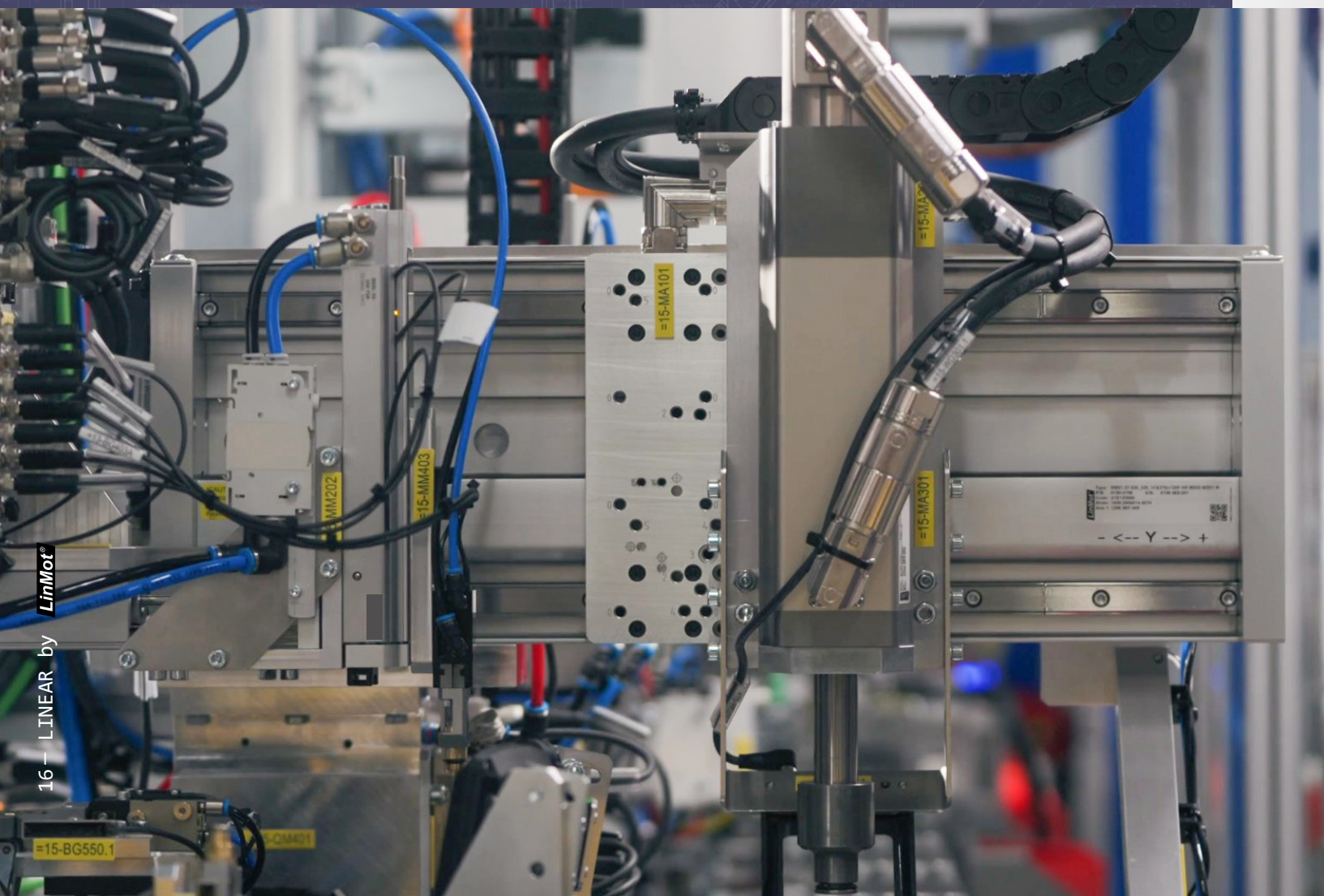
> Of course, machine builders can accept the high customization effort and associated costs and develop their own solutions for simple handling tasks. But in practice, the first hurdle soon becomes apparent.
>
> Andreas Nowak
> Managing Director at TEAM Automation Berlin

As Andreas Nowak, Managing Director of TEAM Automation Berlin, explains, in-house solutions are always possible but at the same time, one of the biggest challenges of conventional drive solutions arises: “In pick-and-place applications, the Z-axis must also be equipped with a motor. However, this significantly increases the moving mass on the X-axis, which in turn requires a larger motor for that axis.” Especially with typical stroke lengths of around 200 mm, such cantilever designs result in high moving masses, large space requirements, and insufficient rigidity – particularly in dynamic applications. LinMot’s Flat Robots and Systems directly address this fundamental issue: they are exceptionally space-saving, modular in design, and purpose-built for the handling tasks that define modern automation.

Dynamics meets flexibility

Another key challenge in automation is flexibility. The continuously growing variety of component types that need to be assembled quickly pushes conventional solutions to their limits. “When I have three differently positioned feeders to bring components together, pneumatic systems soon reach their limits. LinMot axes, on the other hand, offer the required flexibility and the dynamics to match,” explains Mr. Nowak. Indeed, LinMot Flat Robots and systems offer decisive advantages through their unique motion structure: compared to other kinematics, they are not only more energy- and cost-efficient, but also far more flexible in workspace design. At the same time, they combine high speed with precise and repeatable motion control. This makes them ideal for applications that require exact movements and repeated positioning – from high-speed sorting and pick-and-place tasks to assembly, capping, screwing, and handling processes.

The modular design principle saves a considerable amount of time during construction and machine assembly. This is complemented by a wide range of standard systems, enabling quick coordination with customers and short delivery times.



Easy-to-clean surface

PP05
Pick-and-Rotate

Short cycle times for high-speed tasks

A further key advantage of LinMot Flat Robots and systems lies in their modular design. This allows the compact LinMot linear motors, modules, and guides to be flexibly combined into proven Cartesian structures such as semi-gantry, gantry, or other multi-axis systems. The result: solutions that enable even complex, industry-specific requirements to be implemented quickly and precisely – while maintaining high dynamics. Despite the integration of multiple carriages and Z-axes, the Flat Robots and systems remain extremely space-saving, low in interference contours, and easy to maintain and expand.

The LinMot axes provide the necessary flexibility and dynamics.

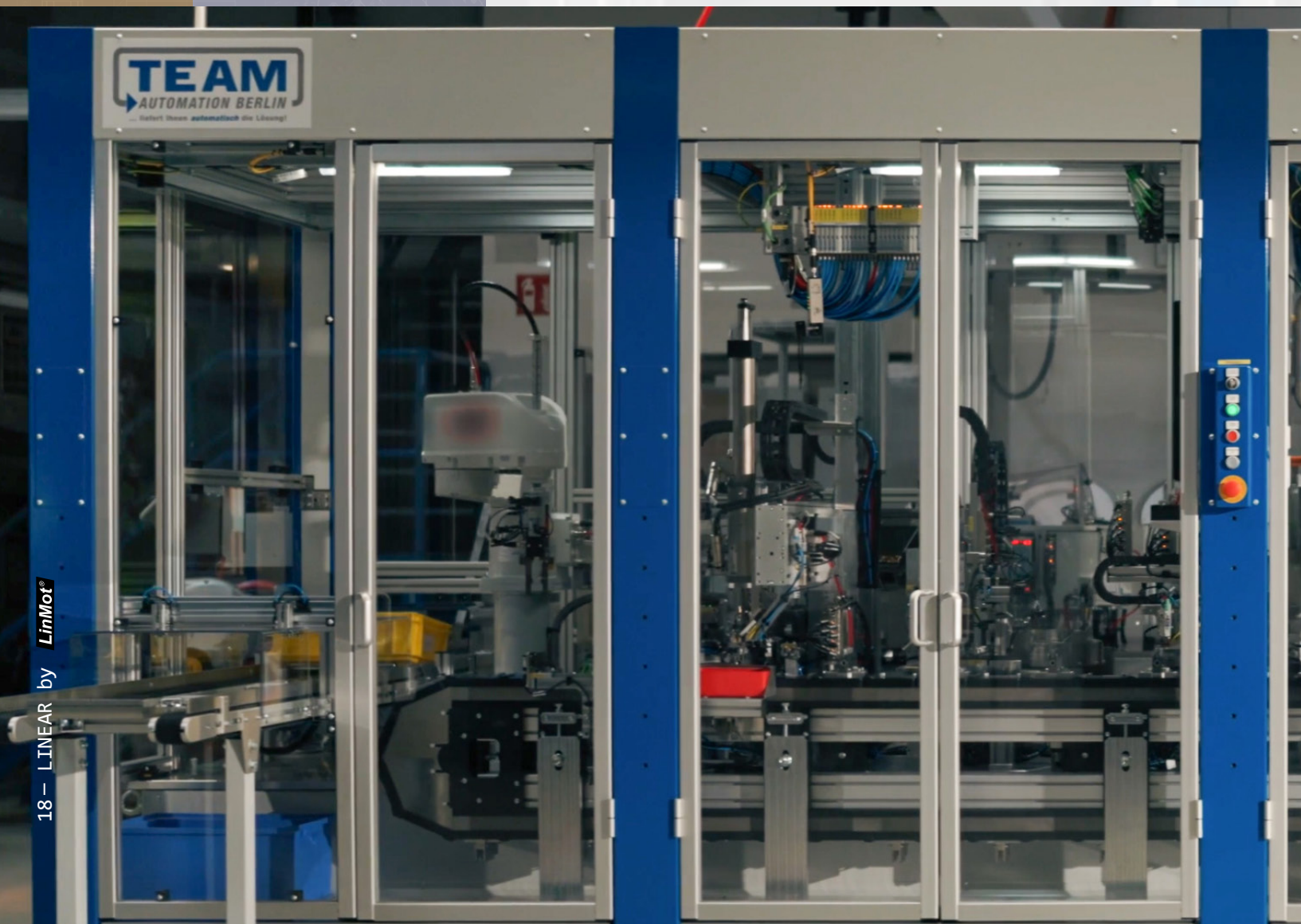
Andreas Nowak
Managing Director at TEAM Automation Berlin

Stainless steel version!

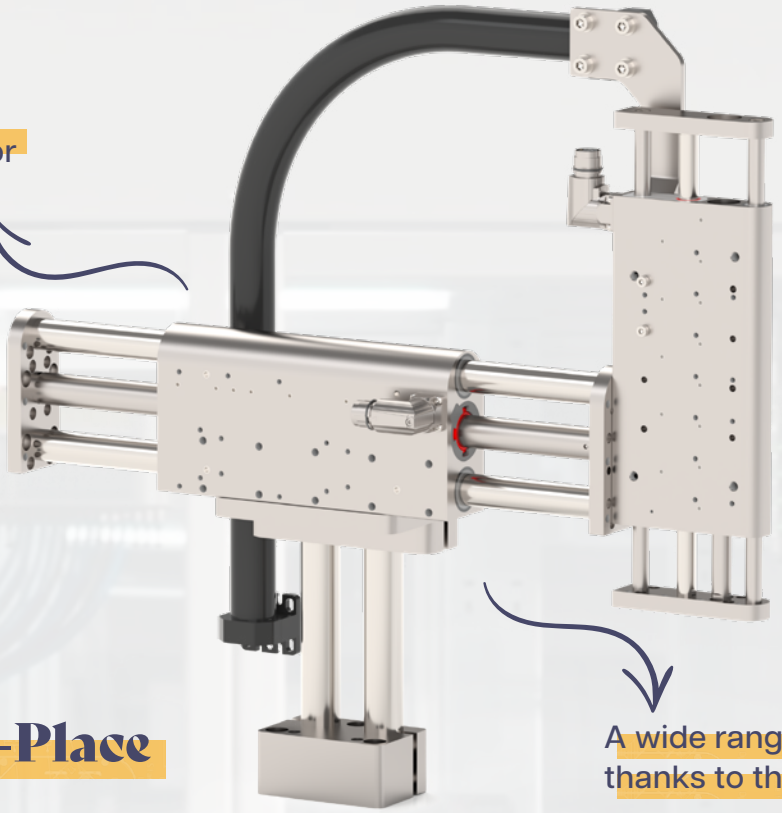
The reliable PR02 linear rotary motor is now available in a hygienic stainless steel version, ideal for use in the chemical, pharmaceutical and food industries. This makes the PR02 even more versatile, offering increased resistance to cleaning agents and minimal maintenance requirements.

More freedom through standards

For machine builders aiming to stay competitive, standardized drive components are almost indispensable. The reason is obvious: well-thought-out base solutions save not only costs but also valuable engineering time. With its Flat Robots and systems, LinMot offers a broad portfolio of basic configurations that combine dynamics and precision in a highly compact design. “After all, the product itself often defines the requirements. For our application, we needed very narrow handling units and the LinMot solutions were the perfect fit right from the start,” confirms Mr. Nowak. This is further enhanced by a wide range of options such as external encoders, force or torque sensors, hollow shafts with air feed-through, or preassembled trailing chain solutions – that add even more flexibility. The result is the perfect combination of standardization and individuality: specific requirements can be implemented without compromising fast and efficient realization.



Plug-and-play for immediate use



High degree of customisation

A wide range of options thanks to the modular system

PP03 Pick-and-Place

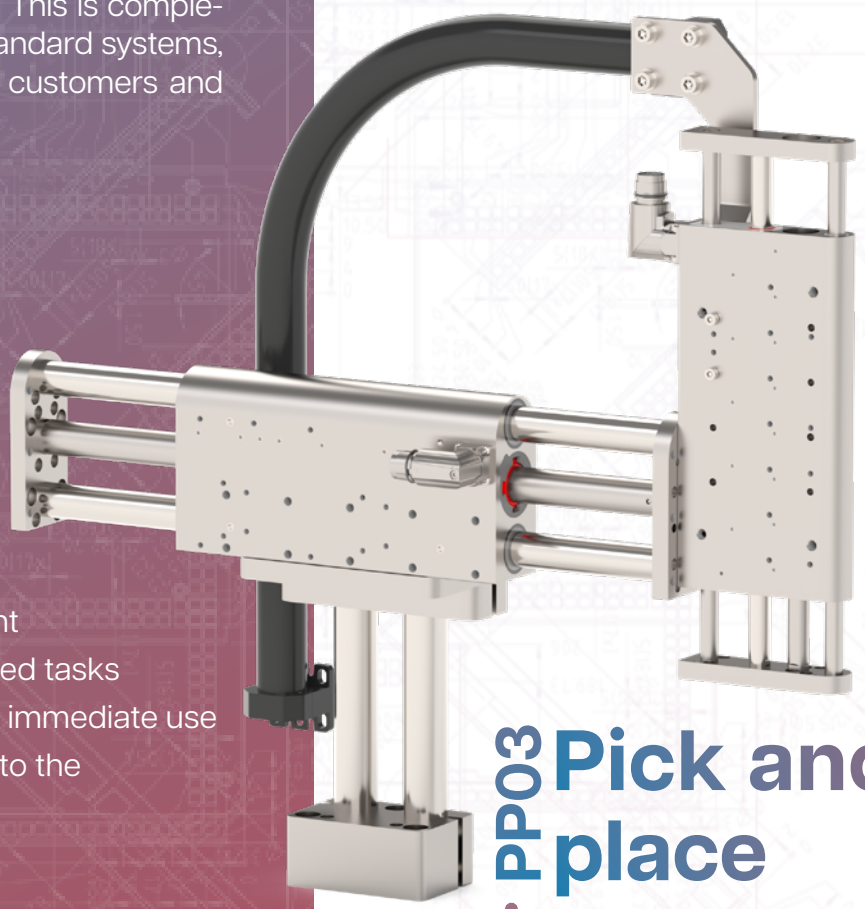
Our new Products

New modular systems

The space-optimised LinMot systems offer modular solutions that can be individually tailored to meet complex production requirements and manufacturing processes, from clean rooms to dusty production environments. All systems are also available as safety versions on request and include functions such as functional safety and SLS. Numerous integration options are also available, including various trailing chain variants, mounting brackets, adapters, and practical assembly tools.

The modular option kit significantly reduces design and machine assembly time. This is complemented by a broad portfolio of standard systems, enabling quick coordination with customers and ensuring short delivery times.

Fully assembled and ready to use



Your benefits

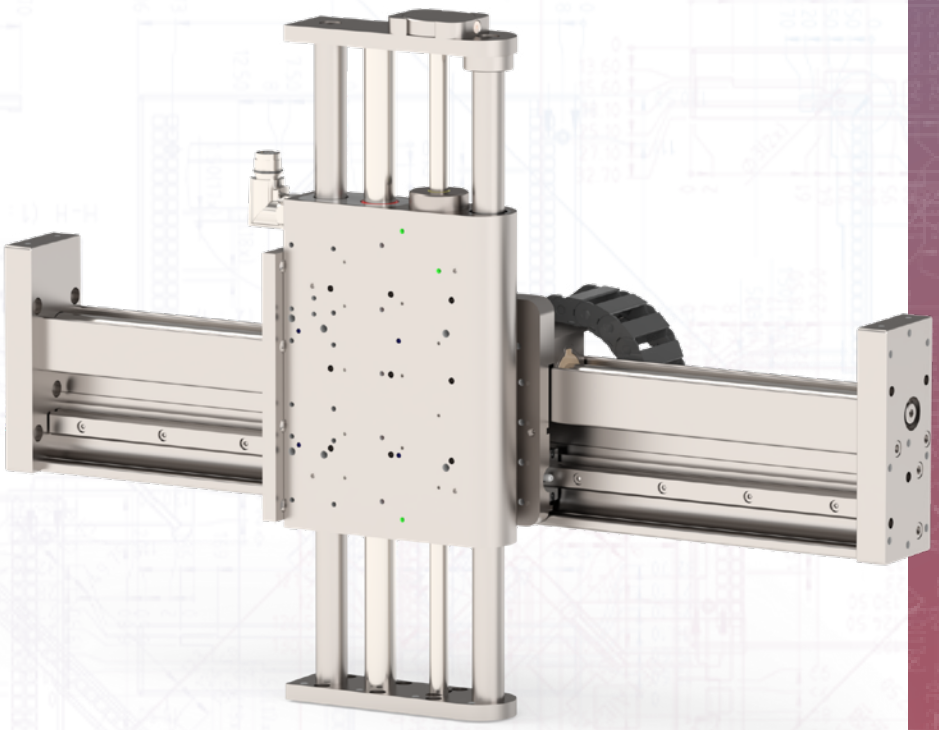
- Excellent dynamics
- Slim design for a small footprint
- Short cycle times for high-speed tasks
- Fully assembled and ready for immediate use
- Wide range of options thanks to the modular system

Visit our website at *linmot.com*

PP03 Pick and place

TP03

Transfer-portal

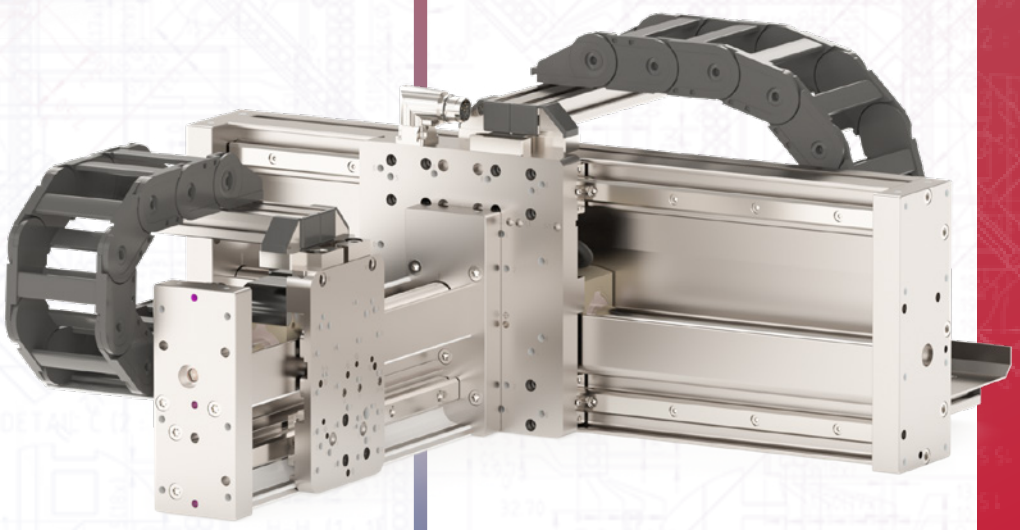


PP05

Pick and rotate

GT01

Semi gantry



A journey with drive

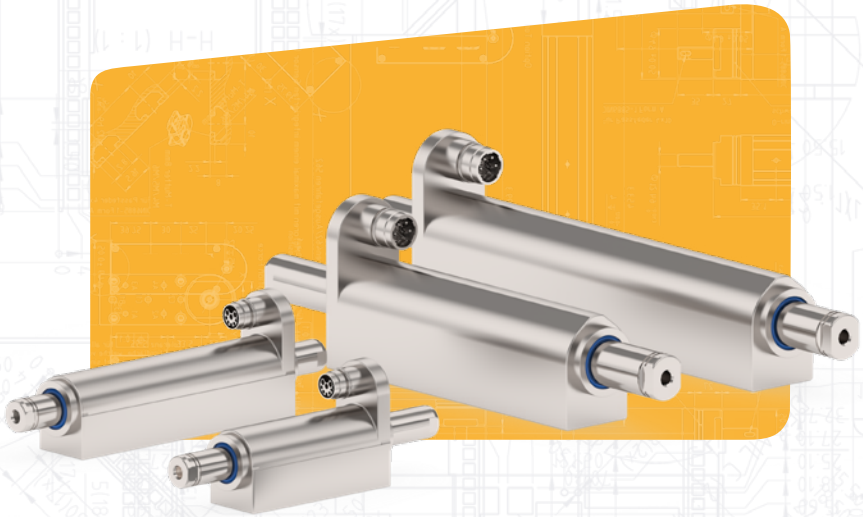
The *LinMot* Evolution

What began in 1997 with a single linear motor has grown into an impressive success story. Over the years, new technologies, variations, and ideas have continuously been added: robust stainless steel motors for hygienic environments, versatile linear-rotary motors, and compact grippers. Today, we offer complete multi-axis systems that allow highly dynamic and complex processes to be automated with ease. Looking back, this evolution feels like an exciting journey: step by step – or rather, stroke by stroke – fueled by a passion for motion, close collaboration with our customers, and a constant drive to explore new paths in automation. On this page, we highlight the most important milestones – a timeline through three decades of innovation.

1997

One linear motor and a clear vision...

...bringing linear direct drives into series production. The first motor of the still very popular P01 series marks the starting point and injects fresh momentum into drive technology. A little more than 1.44 MB of innovation that redefined motion.



2009

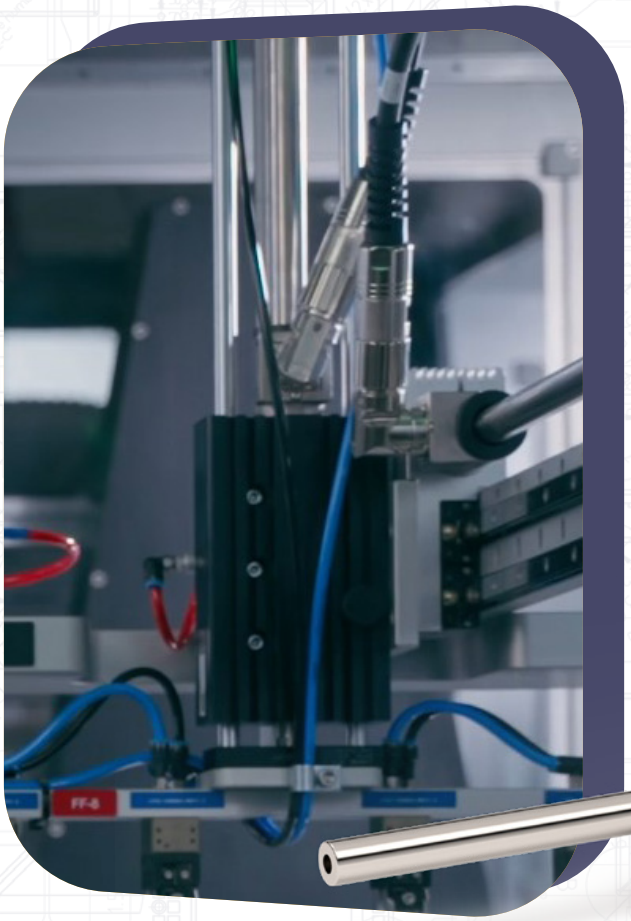
Hygienic down to the last micrometer

LinMot's first stainless steel motors conquer hygiene zones where water, chemicals, cleaning agents, and strict regulations are part of everyday life. At the same time, ATEX motors make their debut – built for zones where even a single spark would be too much. Precision that shines and protects reliably.

2003

The linear motors gain reinforcement

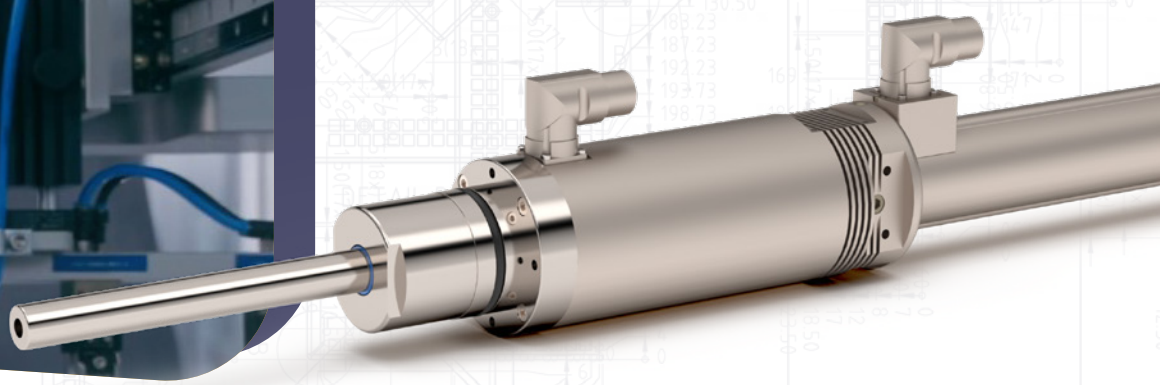
In 2003, LinMot launches the first H01 and B01 linear modules. Fully integrated mechanically, resistant to forces as well as torsion and bending moments, and ready for the tough industrial daily grind across all sectors. The path is clear for precise linear motion right inside machine design.



A real breakthrough

LinMot introduces the PR01 linear-rotary motor: a mechatronic innovation that combines linear and rotary motion in a single compact unit. Precise positioning, controlled rotation, and maximum flexibility – all housed in one design. Perfect for applications that demand more than just one axis.

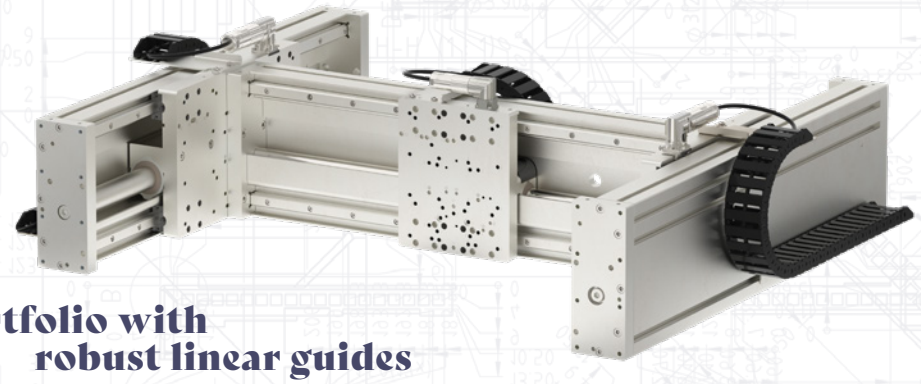
2011



2014

Linear-rotary technology on a new level

More compact, more efficient, and packed with even more features, the new linear-rotary motor PR02 excites designers worldwide. Ideal for lifting, rotating, screwing, assembling, positioning, and much more – a highly successful all-round package for automation.



2015

New portfolio with robust linear guides

The missing puzzle piece for semi-gantry and gantry systems. Multiple axes can now be combined precisely, heavy loads moved dynamically, and complex customer and industry requirements realized. In short: more degrees of freedom for design, more possibilities for automation.

2020

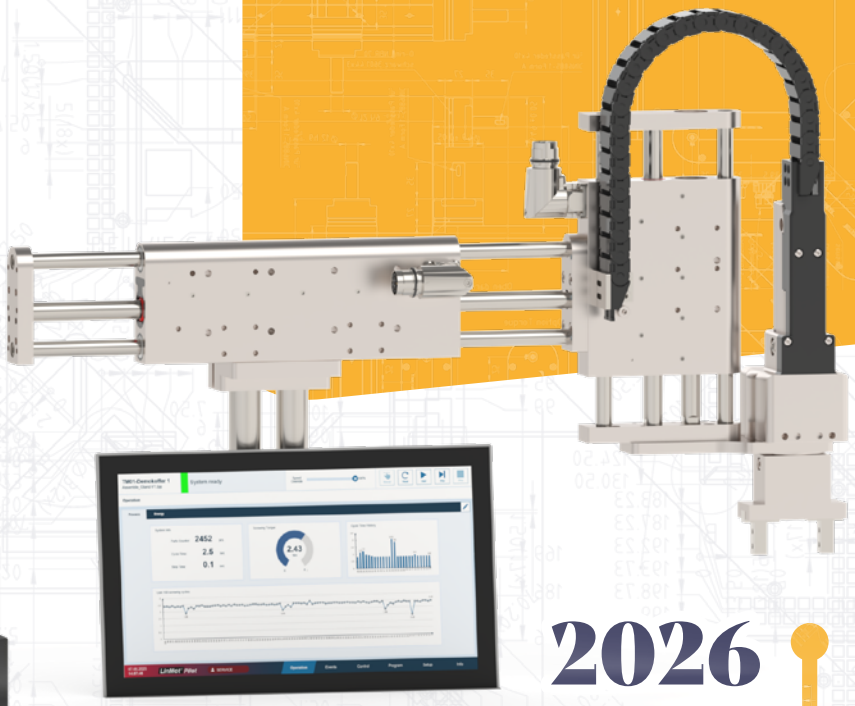
Clean drive, clean business

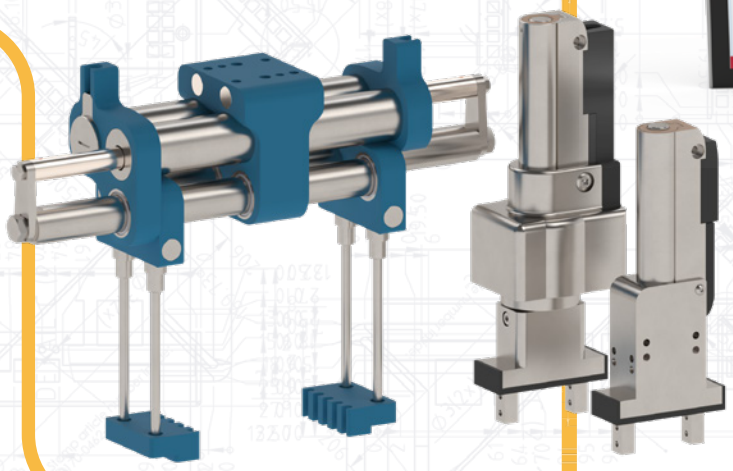
In 2020, LinMot launches the DM01 linear modules. Precise, powerful, and later even certified as cleanroom-compatible by the Fraunhofer Institute. For applications where cleanliness is paramount, they deliver linear precision without particles – true to LinMot's motto: uncompromisingly reliable.

2023

A unique product line

The GM01 stainless steel gripper for hygienic and washdown applications, as well as the GM50 and GM51 parallel grippers – the latter featuring an integrated rotary motor. These new directions of motion open exciting opportunities for precise, flexible, and reliable gripping across industries worldwide.

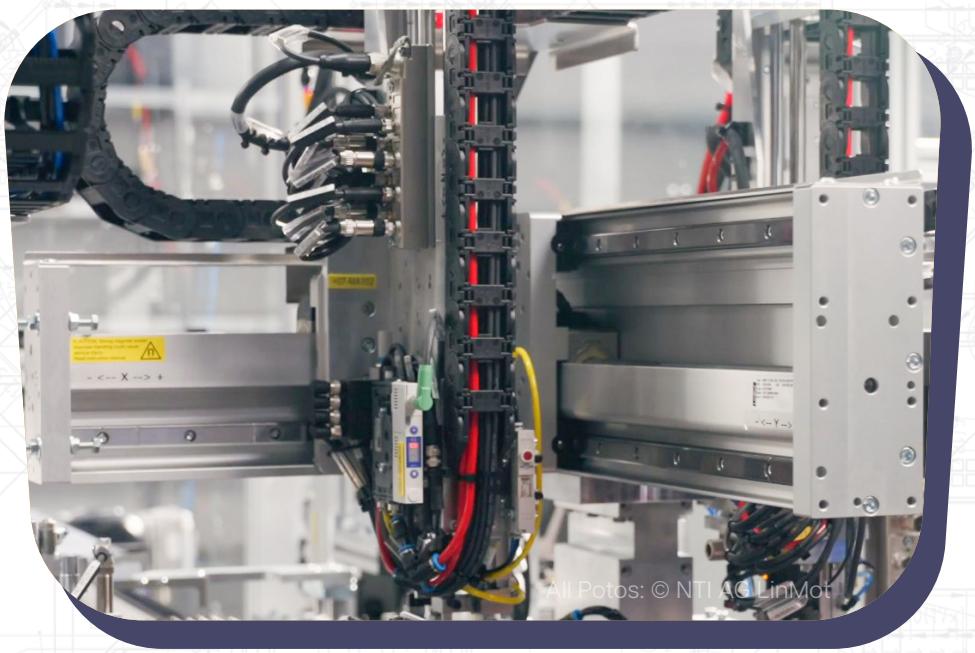




2026

LinMot Pilot takes of

The new software platform that gives engineers full control, transparency, and simplicity. From first configuration to ongoing optimization, Pilot supports, simplifies, and accelerates every step. Automation becomes more intuitive, smarter, and more limitless than ever before.



All Potos: © NTI AG/LinMot

2024

The Flat Robots take the stage

Ultra-flat, modular systems that fit into machines like puzzle pieces. Their compact design saves space, creates flexibility, and unlocks entirely new degrees of freedom for developers who want to make automation smarter, more efficient, and more dynamic.

Take me to the Pilot!

How can complex automation be achieved without PLCs and traditional programming?

Q&A

LinMot Pilot

We spoke to **Reto Brumann**, LinMot's Product Manager for Robotics and the driving force behind LinMot Pilot, to find out more about this smart solution's idea, functions and potential. Read on for an interview about skills shortages, user-friendly technology, and the courage to simplify.

What is LinMot Pilot?

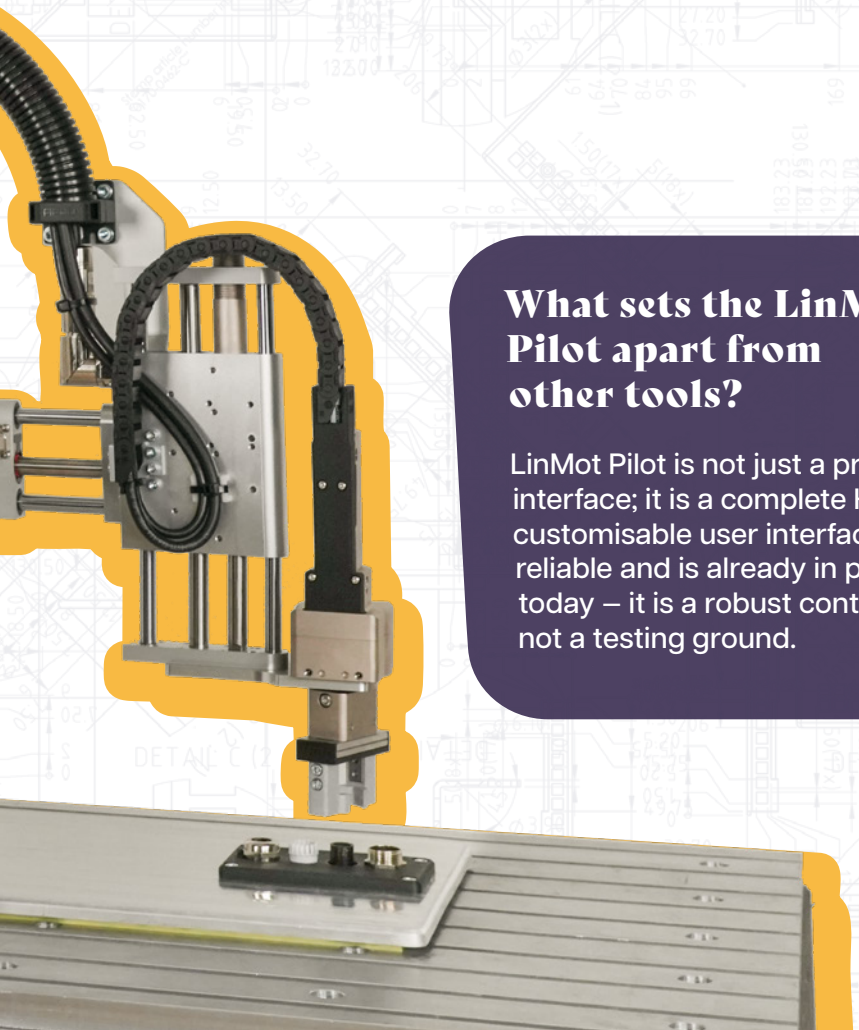
LinMot Pilot is a user-friendly, web-based platform for configuring and controlling multi-axis LinMot systems, eliminating the need for PLCs or in-depth programming knowledge. Rather than using complex code, LinMot Pilot relies on customisable commands and intuitive widgets. This enables complex processes such as screwing, conveyor synchronisation and pick-and-place with camera connection to be implemented safely and efficiently.

How did the idea come about?

The increasing demand for simple, intuitive solutions, driven by a shortage of skilled workers and ever-more complex requirements, inspired us. Following on from our flat robots and grippers, offering a suitable control platform was the next logical step.

What was the development goal?

Thanks to our expertise gained from numerous applications, our products should be usable without any programming hurdles. LinMot Pilot enables even the most demanding applications to be implemented quickly and easily.



What sets the LinMot Pilot apart from other tools?

LinMot Pilot is not just a programming interface; it is a complete HMI. The customisable user interface is process-reliable and is already in productive use today – it is a robust control solution, not a testing ground.

less coding more motion

What main functions are offered by LinMot Pilot?

Sequential programmes can be created in just a few clicks. These programmes can include IF queries, waiting times, jump labels, variables and movement commands. There are also function packages available for specific processes, such as screwing or smart camera integration.

How does it all work without programming knowledge?

All movement commands can be selected, configured and sequenced via a drop-down menu. Positions can be taught using a teach button or manually. If desired, variables can also be used without traditional code.

For whom is the LinMot Pilot designed?

For anyone who wants to automate, including system integrators, the automation or development departments of manufacturing companies, test laboratories, and creators of semi-automated workstations. It is ideal for small to medium-sized businesses that rely on flexible, intuitive solutions.

Does the LinMot Pilot really save time and resources?

Absolutely. The entire configuration process is carried out via the web interface, with no need for additional software. Thanks to guided input, even complex tasks can be solved without the need for PLC experts, and typical programming errors are avoided.

What's next?

We are already working on new feature packages for belt-fed processes, smart camera applications, screwdriving solutions, and advanced process monitoring. LinMot Pilot evolves to meet the changing needs of our customers.

Application	Challenge	Solution with LinMot Pilot
Camera-guided pick-and-place	Dynamic position detection	Interface to smart cameras and programmable movement commands
Screwing application	Repeatability and force control	Predefined screw modules with adjustable parameters
Band synchronisation	Synchronisation with moving parts	Simple configuration for synchronised movement with the belt speed
Coordinated movement of multiple axes	Sequence control and process reliability	Sequential processes with IF logic and wait instructions

The best no-code platform for your machine

LinMot® Pilot

Contact your LinMot sales team to arrange a live demo, and start your trial licence now. So that your automation no longer costs you time – but saves it.

Coming soon...

You can look forward to the following developments soon!

PRO2-52/70
Linear rotary motor with 3-finger gripper

This new 3-finger rotary gripper is ideal for gripping rotationally symmetrical parts. With three gripping jaws that position the gripped object centrally to the axis of rotation, it is perfect for orientation, screwing and rotary testing applications, to name a few.

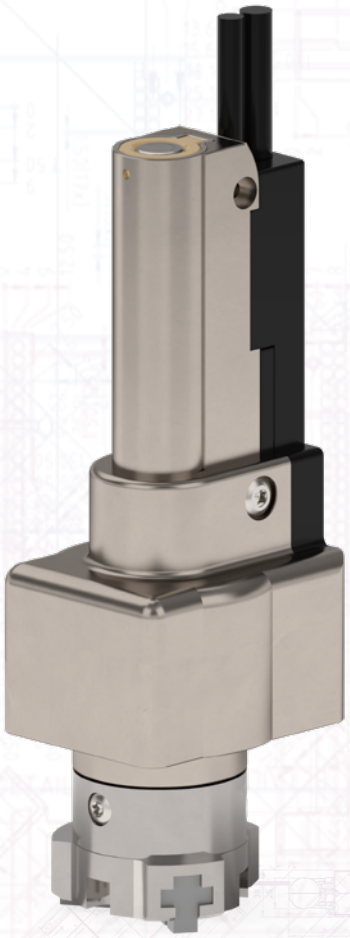
- Linear rotary motor with a 3-finger gripper
- Electric or pneumatic pusher
- Gentle gripping with reduced force
- Gripping positions can be selected freely

Visit our website at *linmot.com*

GM51-23
3-finger rotary gripper

This new 3-finger rotary gripper is ideal for gripping rotationally symmetrical parts. With three gripping jaws that position the gripped object centrally to the axis of rotation, it is perfect for orientation, screwing and rotary testing applications, to name a few.

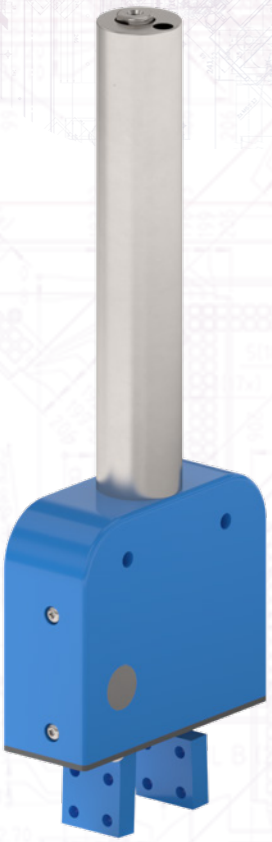
- Rotary gripper with three gripping fingers
- Endless rotation of the rotary motor
- High dynamics thanks to direct linear drive
- Gentle gripping possible thanks to force limitation



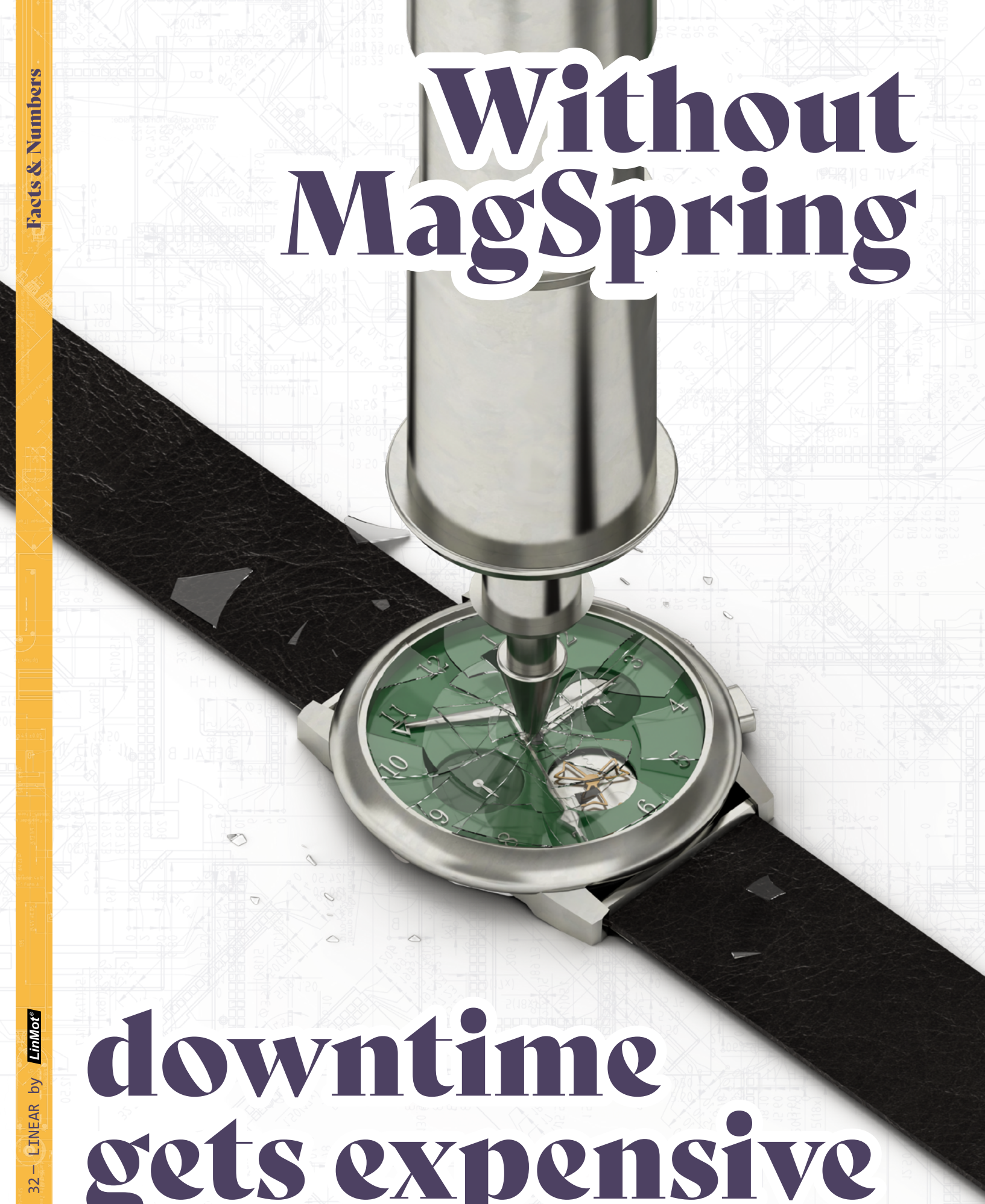
GM03-23
Stainless steel gripper

LinMot will introduce a new gripper from its stainless steel product range with the GM03-23. Thanks to its stainless steel motor and POM-C housing, the GM03-23 is ideally suited to use in the food, pharmaceutical, and chemical industries.

- Compact stainless steel gripper
- IP69K protection class
- Low weight (less than 850 g)
- Corrosion resistance to common cleaning agents

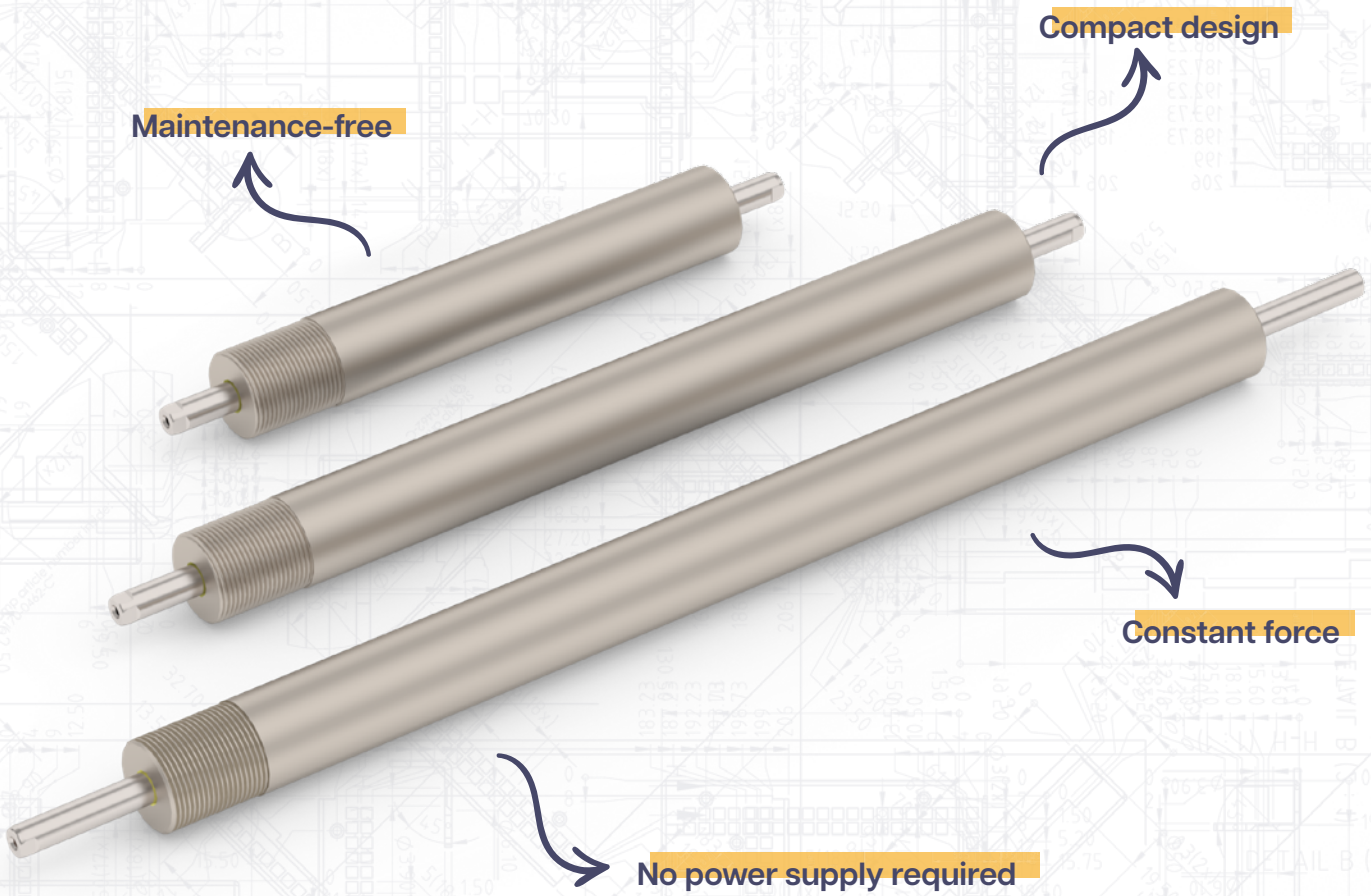


Without MagSpring



downtime gets expensive

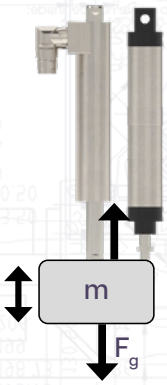
It doesn't take more than an engraving station, an expensive watch, and a sudden power outage to turn precision engineering into costly scrap. Without a power supply, the holding force disappears and what's held above comes crashing down. That's exactly where MagSpring comes into play: a "spring" that isn't one, creating tension that leads to relaxation.



Because MagSpring is more than just a clever component. It provides passive weight compensation, prevents uncontrolled downward motion, and turns system failures into controlled states. No energy supply, no risk – just a simple, robust principle that protects equipment, workpieces, and people.

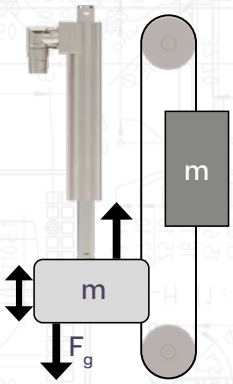
But how did this idea come to life? And why is it so highly valued across industries today? We spoke with **Daniel Ausderau**, the "father" of the MagSpring, to learn how a small detail turned into a solution with a wide-reaching impact.

Pneumatic cylinder



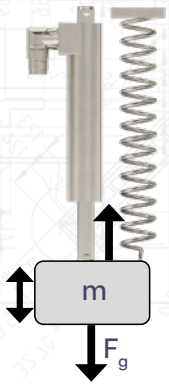
✗ Air reservoir with high tightness or aggregate

Counterweight



✗ Doubling of the moving mass

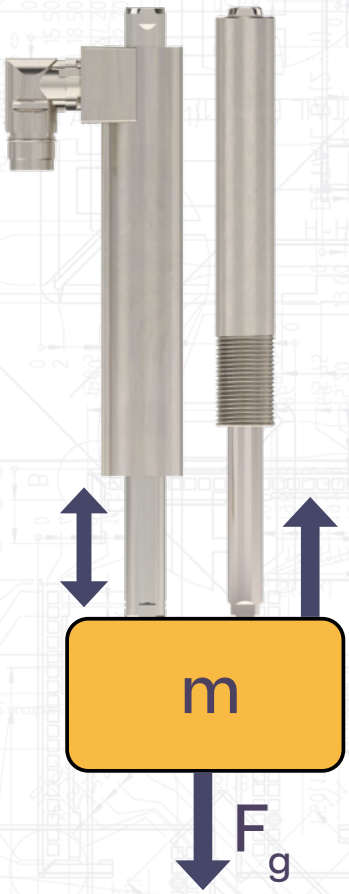
Mechanical spring



✗ Exact compensation only possible at one point

What exactly is MagSpring?

MagSpring is a construction element that, similar to a mechanical spring, generates a defined force over a specific stroke but without any external energy supply. Unlike conventional springs, however, this force remains constant instead of increasing linearly along the stroke.



MagSpring

✓ Constant force over the entire stroke

✓ Requires neither electricity nor compressed air

✓ Low moving mass

✓ Highly dynamic without elasticity

How does a MagSpring work?

MagSpring consists of a permanently magnetic slider and a magnetizable or permanently magnetic stator. Its magnetic topology is designed in such a way that a constant axial force acts throughout the entire working range. A sliding bearing distributed along the full length of the stator ensures smooth guidance of the slider. The result: a robust, low-maintenance, and long-lasting component.

What are the benefits of MagSpring in machine design?

MagSpring is the perfect complement to vertically operated linear motors. Working entirely passively and without any external energy, it compensates for the weight force across the entire stroke. This relieves the linear motor, reducing heat generation and freeing up performance reserves for even faster movements. At the same time, MagSpring acts as a built-in safety element: in the event of a power failure or motor shutdown, it prevents the load from dropping uncontrollably.

Did you know...

...that compressed air is one of the most expensive energy sources in production? MagSpring, on the other hand, needs neither air nor electricity.

Dr. Daniel Ausderau
is the driving force behind MagSpring. To explore its feasibility, a student research project was launched at the Department of Information Technology and Electrical Engineering at ETH Zurich. As an assistant at the university, he initiated and supervised the work – with results that laid the foundation for a remarkable success story. Today, MagSprings are firmly established and widely used around the world.

What are the advantages of MagSpring compared to a counterweight?

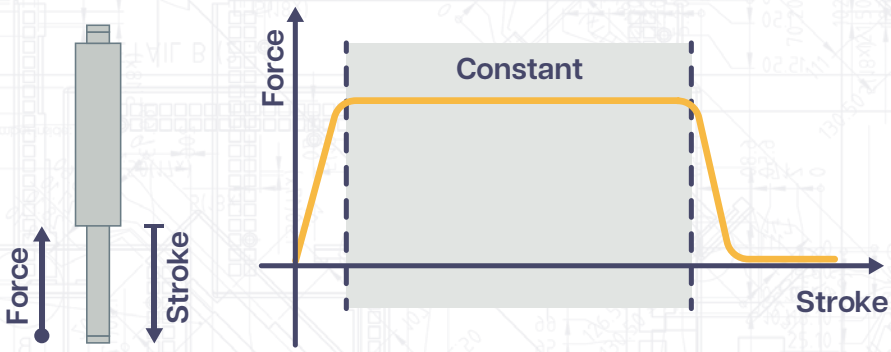
MagSpring stands out with its compact design, space-saving integration, and direct connection – with no need for pulleys, flexible belts, or cables. It increases the moving mass by less than 10 %, while a conventional counterweight can easily double it. Thanks to the minimal added mass and the rigid, backlash-free coupling (without elastic elements), MagSpring ensures excellent controllability and dynamics when combined with a linear motor.

Did you know...

...that, unlike a mechanical spring, MagSpring maintains a constant force over the entire stroke?

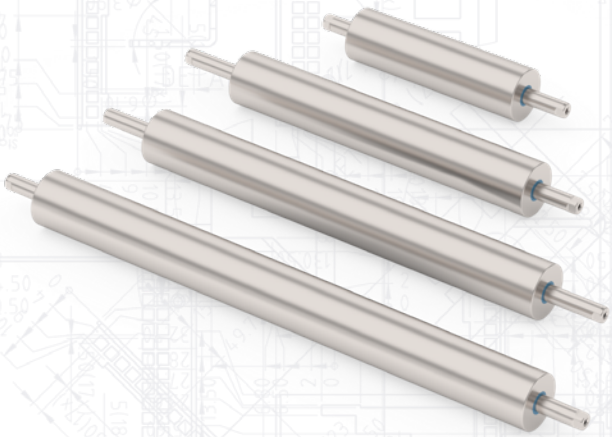
Mechanical spring

MagSpring



Why not just use a mechanical spring or pneumatics?

A mechanical spring with a linear force–displacement characteristic compensates gravity perfectly only at one specific point and tends to oscillate during dynamic operation. Pneumatic systems, on the other hand, rely on compressed air. Their seals require regular maintenance and result in a significantly shorter lifetime compared to MagSpring.



Did you know...

...that MagSpring is also available in a washdown-compatible stainless-steel version and even integrated into our drives?

Which applications and industries use MagSpring most frequently?

MagSprings are used in combination with vertically operated linear motors across all industries and applications. They are found in single-axis systems as well as in Z-axes of multi-axis setups, such as pick-and-place modules and robotic systems.

Our new Products

F1150 Drive
Maximum performance

With the new F1150, LinMot has focused on achieving a balance between performance and simplicity. This compact drive combines EtherCAT and CANopen interfaces, offering convenient Ethernet configuration and Safe Torque Off (STO). The ability to program up to 50 motion profiles, real-time streaming and plug-and-play functionality for LinMot motors and third-party actuators opens up new possibilities for dynamic and flexible applications, making automation smarter, faster and safer.

F1050 Drive
Small, smart, powerful

The new F1050 Mini Drive delivers full performance in minimal space. With its EtherCAT and CANopen interfaces, convenient Ethernet configuration and plug-and-play functionality for LinMot motors, it offers maximum flexibility. Up to 50 programmable motion profiles, real-time streaming and integrated process monitoring ensure precise, safe operation. Thanks to its compact design, the F1050 is the ideal solution for smart, space-saving automation concepts.

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LinMot products
can be integrated into all
common control systems

Schneider Electric

OMRON

BOSCH

BECKHOF

MATLAB
SIMULINK

B&R

CODESYS

SIEMENS

Lenze

KEB

Rockwell Automation

LabVIEW

F1150 Compact drive

- 32 A power stage
- Safely stopped torque (STO)
- Interface for incremental and absolute sensors
- Optimised for LinMot motors and third-party actuators

EtherCAT® CANopen

F1050 Mini drive

- 32 A power stage
- Optimised for LinMot motors
- Up to 50 programmable motion profiles
- Process monitoring & real-time data evaluation

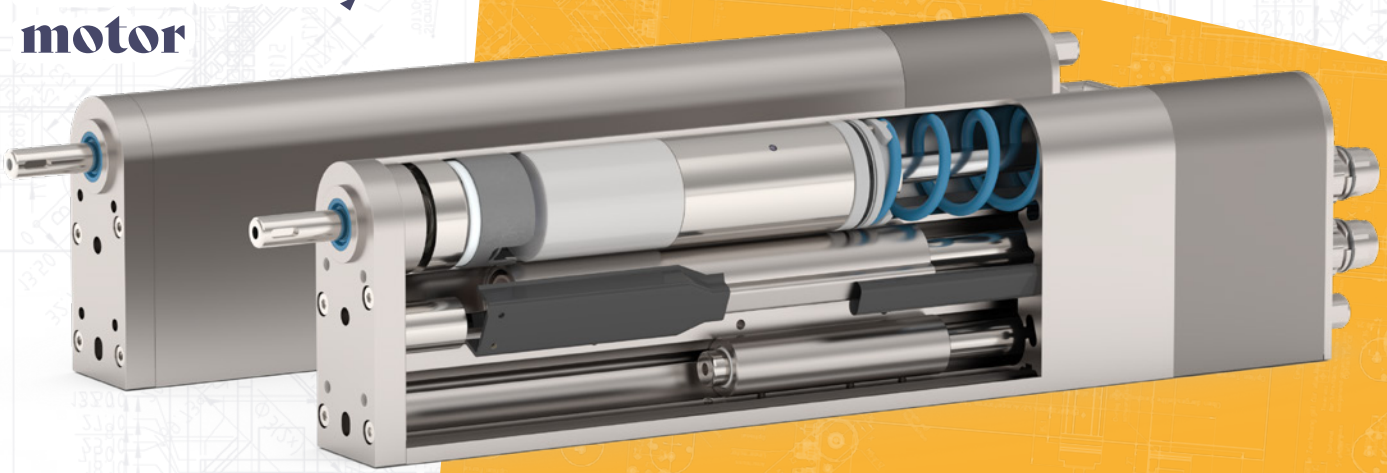
EtherCAT® CANopen

DM01
Linear module

New dimensions
More freedom in your design

As demands for compact, high-performance, and highly precise drive systems continue to grow, LinMot is expanding its portfolio with purpose. The PR02 linear-rotary motors and DM01 linear modules are now available in an additional size, giving engineers even greater design freedom. Smaller installation spaces can now be realized with the same proven LinMot dynamics and performance. Designers benefit from slimmer configurations, reduced moving mass, and easier integration into compact machine layouts – all without compromise on speed, repeatability, or load capacity.

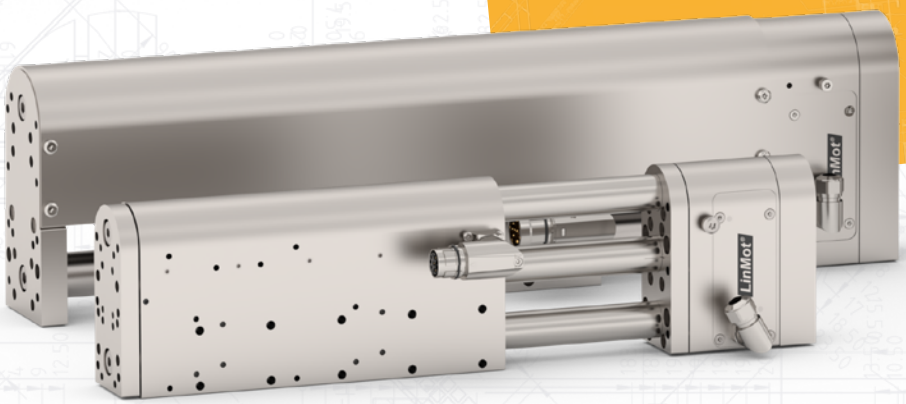
PR02
Linear rotary motor



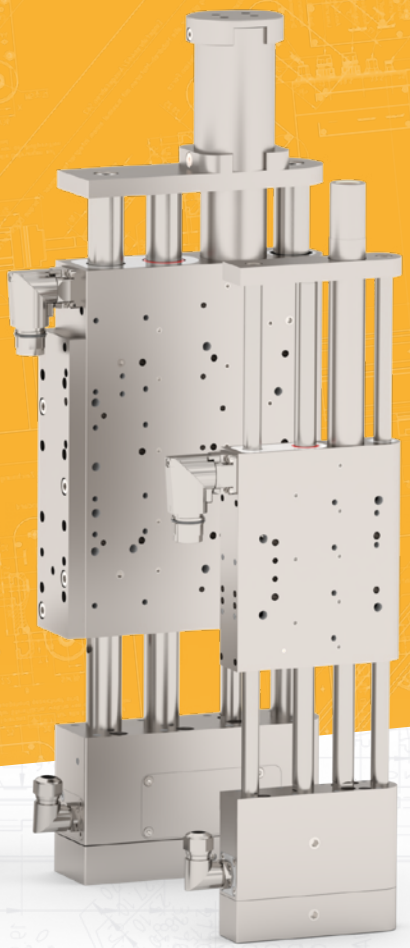
Force control as standard

Higher precision at every step

At the same time, all DM01 and DM03 linear modules are now available with optional integrated force sensors. This smart sensing technology enables built-in force control directly within the module, increasing process reliability and simplifying traceability of critical production data. Whether in delicate dosing and assembly tasks, sensitive handling in pharmaceutical applications, or high-speed pick-and-place operations, the ability to measure and control forces in real time sets new standards in quality and automation.



DM01
Linear module



DM03
Linear module

More system value

Less engineering effort

Together, the new sizes and the now widely available force sensing technology deliver tangible benefits: shorter design cycles, fewer adaptations, smoother commissioning, and higher repeatability in series production. For you, that means faster time-to-market, reduced integration effort, and better-documented processes. In short: greater efficiency across your entire value chain.

New Website
New Experience

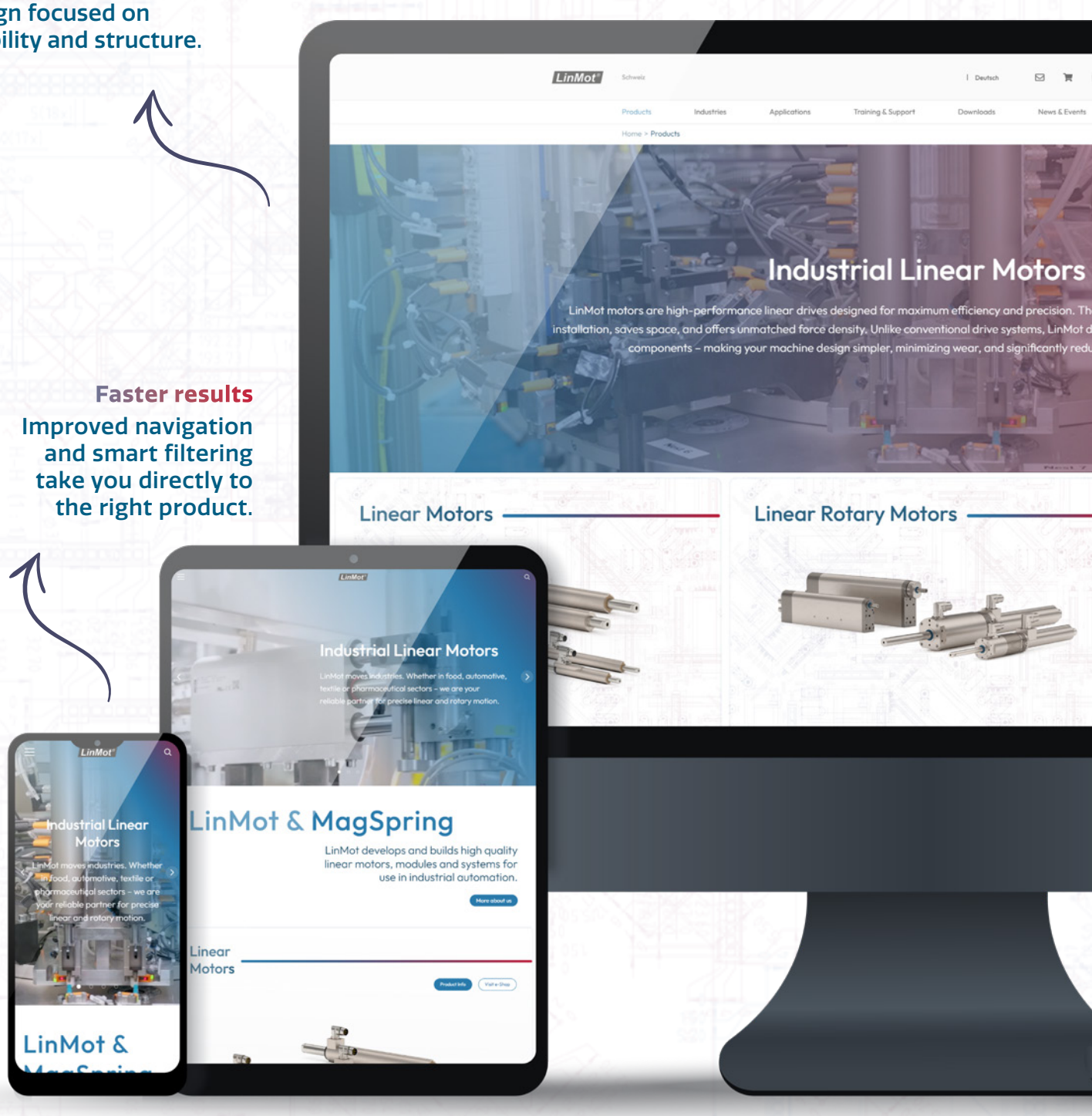
modern • intuitive • LinMot

Clarity at first glance

A modern, spacious design focused on usability and structure.

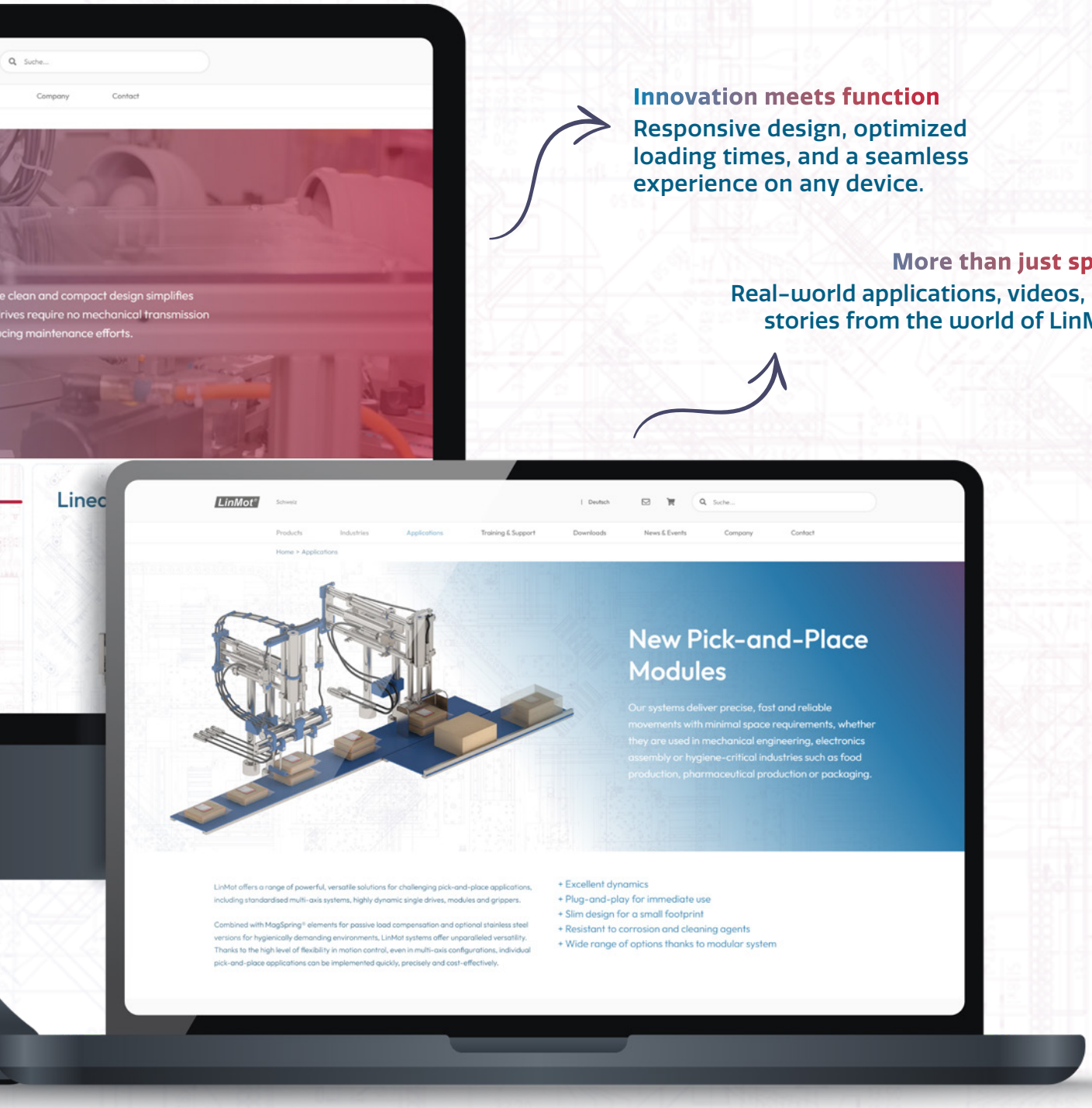
Faster results

Improved navigation and smart filtering take you directly to the right product.



Our products stand for precision, efficiency, and innovation.
And now, that same spirit defines our online presence.

With the upcoming launch of our new website, we're completing the final step of our comprehensive redesign and presenting LinMot exactly as our products are: clear, forward-thinking, and engineered down to the last detail. The new site combines modern design with intuitive navigation, giving you everything you expect from an innovative technology partner: clarity, speed, and relevance. Instead of browsing through endless lists, visitors can now reach their destination in just a few clicks – whether it's a product, an industry, or a specific application.



Innovation meets function
Responsive design, optimized loading times, and a seamless experience on any device.

More than just specs
Real-world applications, videos, and stories from the world of LinMot.

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LinMot Pilot

Your no-code solution for modern automation