Press Release

Less complexity, greater performance: Lenze showcases the “best axis live” on SPS 2026

Nuremberg/Aerzen, November 11, 2026. What motion solution do machines and systems really need? At SPS 2026, Lenze puts this question at the heart of its presence. Under the motto “The best axis live,” the company demonstrates its application-driven approach to drive solutions. Live exhibits show how mechatronics, electronics, software, AI and services come together to simplify engineering and integration while delivering the right motion performance for each application.

“Many customers today are struggling with too much complexity,” explains Lenze CEO Dr. Marc Wucherer. “Our job is to bring that complexity back under control.” Visitors to Hall 7, Booth 391 can experience how Lenze translates this ambition into concrete solutions. Here, the “best axis” comes to life as an interplay of technologies precisely tailored to each customer application. Motors and gearboxes provide the foundation, while scalable drive technology delivers performance and flexibility. Software and AI simplify engineering, commissioning and optimization, while services ensure performance throughout the entire lifecycle.

The Best Axis for Material Handling and Logistics

From dynamic positioning in conveyor systems to transporting heavy loads with electric monorail systems, warehouse and airport logistics as well as courier, express and parcel applications demand highly versatile drive technology. With exhibits including the **Motor Drive System IE5/IE6** and the **Electric Monorail System (EMS)**, Lenze demonstrates how the **best axis** can reduce both complexity and costs in these applications.

Servo-light without servo complexity: Conveyor systems need to stop precisely, position workpieces accurately and handle varying loads reliably. A full servo architecture, however, is often more than the application requires. Machine builders therefore face a difficult choice: conventional drive solutions may not provide sufficient performance, while servo solutions add hardware, wiring, engineering effort and costs. The **Motor Drive System IE5/IE6**, a building block of the best axis, provides a different approach. Lenze combines motor, gearbox, inverter and software in a simpler drive architecture that delivers servo-like performance. Without an additional sensor, the axis can position precisely, synchronize movements and handle dynamic start-stop operations. This simplifies integration and speeds up the process from dimensioning to a working motion solution. High efficiency even at partial load and an overload capability of up to 300 percent also allow the drive to be sized more closely to the application's actual requirements, avoiding unnecessary performance reserves. The result for machine builders is the required performance with less complexity and system costs reduced by up to 30 percent. Operators also benefit from lower operating costs.

One platform for every motion: Electric monorail and floor-based systems need to perform a wide variety of motion tasks, from moving heavy loads and lifting or lowering to swiveling and conveying. As the number of trolleys increases, managing different drive solutions, complex control cabinet technology and the associated engineering effort becomes increasingly challenging. With the **Electric Monorail System (EMS)**, Lenze shows how the best axis addresses this complexity with a common platform. **Decentralized i550 and i650 motec frequency inverters** are installed directly at the axis, reducing control cabinet space, installation effort and wiring. EMS gearboxes with disengaging clutches in three sizes, the MF motor and i-series motec inverters up to 45 kW cover a broad range of motion and performance requirements within the same system. **PROFIsafe, Common Industrial Protocol (CIP) Safety and Functional Safety over EtherCAT (FSoE)**, along with integrated brake control for the hoist, simplify the implementation of safety functions.

The Best Axis for Fast-Moving Consumer Goods (FMCG) Applications

High cycle rates, precise motion and short commissioning times are key requirements in FMCG production. Machine builders need to implement complex multi-axis and robotic applications quickly and reliably while keeping engineering effort and system complexity

under control. With the **Juggler** and **Inline Robotics** exhibits, Lenze brings this approach to life in two different applications, demonstrating how the **best axis** combines high motion performance with simpler engineering.

Simplifying highly dynamic multi-axis tasks: Complex motion profiles, such as those found in packaging machines, require precisely synchronized axes and can involve significant programming effort. The **Juggler** demonstrates how three elements of the best axis work together: mechatronics, electronics and software. Horizontal and vertical axes throw and catch balls in a precisely controlled sequence, showcasing their coordinated interaction. The new **servo motor platform** with MCS motors and gearboxes provides the required dynamics. The **i950 cabinet DC-Link servo inverter** with its integrated DC bus system synchronizes the axes, while the **c530 controller** coordinates the complex motion sequences centrally. **Lenze FAST Electronic Camming** turns complex motion profiles into configurable functions, reducing custom programming. This speeds up engineering, makes commissioning more predictable and simplifies the implementation of demanding motion sequences, even without extensive programming expertise.

Making robotics as easy as machine automation: Robot integration often requires specialist expertise, additional control technology and substantial engineering effort. It becomes particularly costly when errors are not discovered until on-site commissioning. The **Inline Robotics** exhibit demonstrates a simpler approach. A delta robot picks products directly from a continuously rotating table without stopping the process. **Rotary Tracking** synchronizes the robot with the rotary table on the fly, shortening cycle times and increasing throughput. The **FAST Robotics Template** allows users to configure robot movements rather than program them from scratch, while the Digital Twin enables processes to be tested and optimized virtually before the physical machine is built. The result is robotics as an integrated part of machine automation, enabling faster engineering, reducing commissioning risks and supporting mechanical components from partners such as Autonox and Neugart.

The Best Axis for Battery Production, Converting and Printing, Material and Textile Processing

Precision winding with fewer components: Applications in battery production, converting and printing, as well as material and textile processing require multiple axes to work together with high precision while handling different motion profiles and dynamic requirements. This becomes particularly challenging with rotating assemblies, where additional sensors and signal transmission increase installation effort and introduce additional components subject to wear. The **Smart Synchro Winder** demonstrates how Lenze reduces this complexity with the best axis. Its two winding axes, equipped with **m650-U IE5 motors**, operate sensorlessly in open loop and determine their angular position without additional motor encoders. This also eliminates the need for slip-ring transmission of the sensor signals, reducing the number of components and simplifying machine design, installation and maintenance. The result is immediately visible: the gears appear to be mechanically coupled, but their movements are synchronized entirely electronically.

Faster to the Best Axis: AI Assistance throughout the Machine Lifecycle

How can AI improve engineering, commissioning, diagnostics and maintenance? Lenze focuses AI on areas where it delivers tangible value in real-world applications. By connecting digital expert knowledge directly with the machine and helping users reach the right motion solution faster, Lenze is bringing **“Physical AI in Motion”** to life. The **Innovation Beacon** showcases four approaches and prototypes across the machine lifecycle: A **Commissioning Agent** guides users step by step through commissioning and troubleshooting. **AI-assisted auto-tuning** makes setup significantly easier. An **LED Analyzer** uses a smartphone to read flashing error codes and recommend possible solutions. The direct integration of interdisciplinary product and change information into machine design, for example in E-CAD, and into the planning and evaluation of security updates also accelerates **end-to-end engineering** throughout the lifecycle.

Could users one day describe their application, much like in vibe coding, and commission an axis with far less specialist knowledge? Lenze is taking this idea further by bringing together

human expertise, AI, domain knowledge and standardized data models. Under the term **Vibe Commissioning**, Lenze is showcasing first concepts and inviting customers to jointly explore what the future of commissioning could look like.

Services: Keeping the best axis performing throughout its lifecycle

Machines need to remain available, productive and cost-effective throughout their lifecycle. That makes **services** an integral part of the best axis. Lenze supports machine builders and operators at every stage, from consulting and planning to engineering, commissioning and ongoing operation, as well as repair and modernization. This gives customers access to support wherever additional resources or expertise are needed, helping reduce downtime and adapt machines to changing requirements. The portfolio spans solution consulting, engineering and training, customer support, spare parts and repairs, as well as emergency and modernization services. At the **Services Communication Point** at the booth, visitors can see how these services can be combined to meet specific needs.

Lenze Selection and encoway: Extending the best axis

With Lenze Selection and encoway, Lenze extends the best axis beyond the motion solution itself. **Lenze Selection** adds mechanical drive components such as linear axes, screw jacks, actuators, brakes and clutches, supporting machine builders beyond the output shaft. **encoway**, Lenze's digital subsidiary, starts even earlier in the process: Its **CPQ (Configure, Price, Quote)** and **Industrial Sales Automation** solutions integrate product, application and sales expertise directly into the sales process, enabling machine builders to configure, calculate and quote variants more quickly. Rule-based product knowledge provides a reliable foundation for AI, helping deliver valid and reproducible results. Together, these solutions extend the approach from product configuration and the optimal motion solution through to its mechanical implementation in the machine.

(Image captions at the end of the document)

About Lenze

For almost 80 years, Lenze stands for drive technology, automation and intelligent motion solutions. The family-owned company, headquartered in Aerzen, employs around 3,200 people worldwide and generated revenue of EUR 680 million in the 2024/25 financial year.

As a specialist in motion technology, Lenze's best axis approach brings together mechatronics, electronics, software, AI and services to provide machine builders with the ideal combination for every application. This helps customers in around 100 countries make their machines more powerful, easier to operate and more economical.

www.Lenze.com

Press Contact Lenze Group:
Silvia Dreyse
Senior Vice President
Corporate Communications & Change
E-mail: silvia.dreyse@lenze.com
Phone: +49 5154 82 1107

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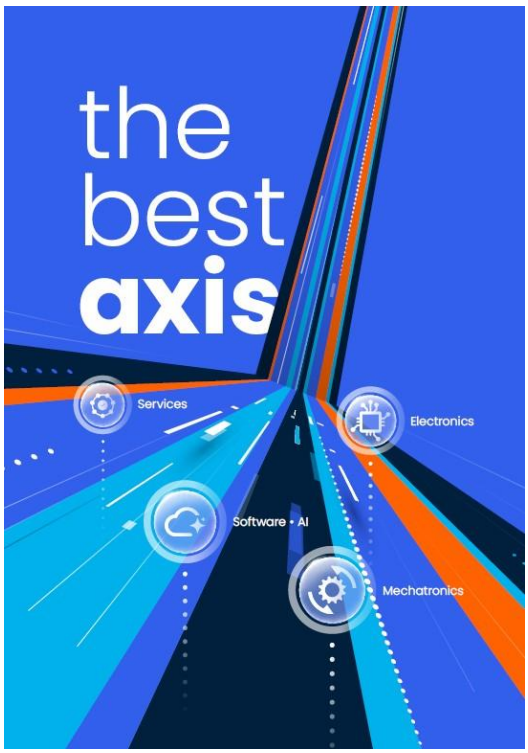


Image 1 – Caption: With the “best axis,” Lenze brings together mechatronics, electronics, software, AI and services to deliver a motion solution precisely tailored to each application. / Image: Lenze



Image 2 – Caption: Lenze CEO Dr. Marc Wucherer is driving the “best axis” forward, consistently aligning motion solutions with customer requirements. / Source: Lenze



Image 3 – Caption: Dynamic positioning, varying loads and high availability: The best axis delivers the right drive solution for demanding material handling and logistics applications. / Source: Lenze



Image 4 – Caption: Inline Robotics makes robotics as simple as machine automation by combining mechatronics, electronics and software to reduce engineering effort and enable highly dynamic pick-and-place applications. / Source: Lenze



Image 5 – Caption: Software and AI make expert knowledge directly accessible to users, simplifying engineering, commissioning, diagnostics and optimization throughout the machine lifecycle. / Source: Lenze



Image 6 – Caption: The Lenze i950 cabinet DC-Link servo inverter combines high motion performance with a compact machine architecture. Its integrated DC bus system saves control cabinet space and provides additional power reserves for dynamic multi-axis applications. / Source: Lenze



Image 7 – Caption: The Lenze c530 controller provides additional computing power for demanding motion tasks and enables motion, communication and visualization to run in parallel on the familiar control platform. / Source: Lenze