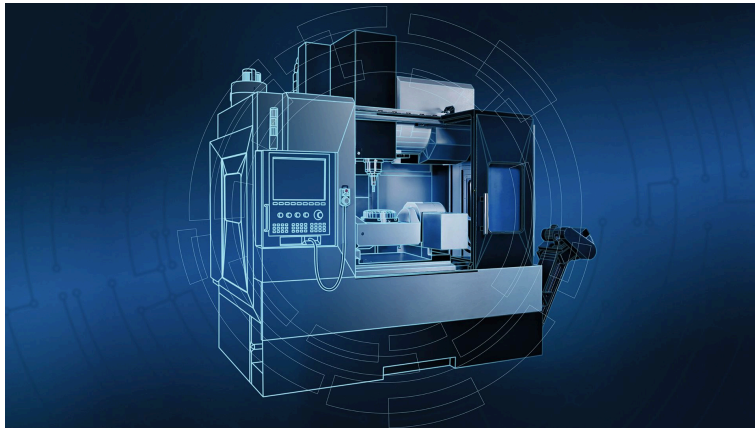


PRESS INFORMATION

Smart solutions for the machine tools of tomorrow

Manuela Kessler | 22.09.2025 | Lohr am Main / Germany | PI 035/25

Bosch Rexroth presents hydraulics and linear technology for future-proof machine tools at the EMO 2025



Bosch Rexroth offers products and solutions that make machine tools more flexible and compact, and that enable more precise and efficient operation. (Image source: Bosch Rexroth AG)

The market environment for machine tool manufacturers is challenging. Automation and digitalization are key drivers for differentiation from the competition and the creation of economic, future-proof machines. However, manufacturers are also increasingly focusing on sustainability. At EMO 2025, Bosch Rexroth presents new hydraulic and linear technology products and solutions that make machine tools more flexible and more compact, and enable more precise, more efficient operation.

CytroPac compact hydraulic power unit: 2nd generation covers even more applications in an energy-efficient way

In future, optional function modules will expand the range of applications for the CytroPac compact power unit. The optimized motor/pump combination increases energy efficiency: In comparison to conventional small hydraulic power units with the same performance, up to 80% of the energy requirement can be saved with significantly quieter operation. Integrated sensors and connectivity options simplify monitoring for maximum system availability.

CKR-280 heavy-duty axis with dual belt: compact handling for large payloads

Bosch Rexroth offers a wide range of linear axes for handling workpieces in and on machine tools. The compact CKR-280 heavy-duty axis with double belt is new to the portfolio. It combines the functions of two linear axes in one linear system. Payloads of up to 385 kg can be moved synchronously or independently of each other on each axis. The independently driven carriages in a single frame enable dynamic applications with high drive torques and short cycle times. Double handling saves valuable installation space and increases productivity. The heavy-duty axis is available both as a single axis and - combined with other linear axes - as a multi-axis system.

Integrated temperature control: for more precision in machine tools

With the patented temperature control option TCRS (Thermo Compensation Rail System) profiled rail systems and screw drives work even more precisely, stably and efficiently in the same space. This unique solution with integrated cooling channels improves the thermal properties of the linear guide and drive components of machine tools involved in the process. This avoids reject and saves on material. The temperature control function is also suitable for retrofits and modular machine concepts.

SMS linear modules: fully configured solutions for self-assembly of single and multi-axis systems

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The handling of small parts requires quick, economical and compact solutions. With the space-optimized Small Modules SMS, Bosch Rexroth offers linear modules available from stock with coordinated drive and connection elements. New, pre-parameterized stepping motors with integrated drive controller shorten the commissioning time. With the extended range of solutions, users can implement both single and multi-axis solutions for handling tasks in and on the machine tool simply, quickly and economically.

Hydraulic Hub: digital toolkit simplifies and accelerates hydraulic service

With its extensive range of digital services, the Hydraulic Hub from Bosch Rexroth simplifies and accelerates the service and maintenance of hydraulic products. Service and maintenance teams can access the online platform 24/7, identify almost half a million Rexroth hydraulic components and retrieve product-related service knowledge and processes with just one click. The digital platform offers support from error detection through to finding solutions and documentation. This enables Rexroth hydraulic systems to be operated even more efficiently and effectively. Bosch Rexroth at the EMO: hall 6, booth H12

Basic Information Bosch Rexroth

As one of the world's leading suppliers of drive and control technologies, Bosch Rexroth ensures efficient, powerful and safe movement in machines and systems of any size. The company bundles global application experience in the market segments of Mobile and Industrial Applications as well as Factory Automation. With its intelligent components, customized system solutions, engineering and services, Bosch Rexroth is creating the necessary environment for fully connected applications. Bosch Rexroth offers its customers hydraulics, electric drive and control technology, gear technology and linear motion and assembly technology, including software and interfaces to the Internet of Things. With locations in over 80 countries, around 32,600 associates generated sales revenue of 6.5 billion euros in 2024.

Basic Information Bosch

The Bosch Group is a leading global supplier of technology and services. It employs roughly 418,000 associates worldwide (as of December 31, 2024). The company generated sales of 90.3 billion euros in 2024. Its operations are divided into four business sectors: Mobility, Industrial Technology, Consumer Goods, and Energy and Building Technology. With its business activities, the company aims to use technology to help shape universal trends such as automation, electrification, digitalization, connectivity, and an orientation to sustainability. In this context, Bosch's broad diversification across regions and industries strengthens its innovativeness and robustness. Bosch uses its proven expertise in sensor technology, software, and services to offer customers cross-domain solutions from a single source. It also applies its expertise in connectivity and artificial intelligence in order to develop and manufacture user-friendly, sustainable products. With technology that is "Invented for life," Bosch wants to help improve quality of life and conserve natural resources. The Bosch Group comprises Robert Bosch GmbH and its roughly 490 subsidiary and regional companies in over 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. Bosch's innovative strength is key to the company's further development. At 136 locations across the globe, Bosch employs some 87,000 associates in research and development.

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