

Festo AX Controls brings fresh impetus to automation

Real-time automation platform from smart control to AI-supported production

Long and complex engineering, programming and commissioning phases slow down many companies. With Festo AX Controls, Festo presents a real-time automation platform that addresses precisely this issue. It combines control, motion, AI, data integration and predictive maintenance in a flexible, scalable solution - perfectly tailored to the requirements of modern industry.

Festo AX Controls comprises a wide range of software modules: the open operating system, control software, visualization tools, high-level languages and low-code options through to commissioning software. The hardware ranges from classic motion controllers and modular controllers to the innovative CEPE edge controller. This results in tailor-made solutions for a wide range of industrial challenges.

Flexible CEPE edge controller

The CEPE edge controller plays a key role here. As the first Festo product with an integrated operating system, the controller is extremely flexible thanks to its open architecture. Software apps can be added both together with the hardware and later separately - for even more adaptability. For demanding applications, the real-time-based platform offers high computing power and controls a large number of synchronized motors and drives in production lines. Festo's complete electric and pneumatic portfolio can be seamlessly integrated - for an open automation architecture with a wide range of applications.

PLCnext Technology as the basis

Festo AX Controls uses PLCnext Technology from Phoenix Contact as its operating system. This platform enables real-time applications, modern programming languages and a seamless cloud connection. The containerized runtime environment ensures a modular software architecture in which AI-based applications also find their place. Festo's partnership with Phoenix Contact and its PLCnext Technology significantly accelerates innovation cycles and bundles comprehensive expertise to master the challenges of digital transformation and cybersecurity.

Software as a driver of innovation

"Software offers enormous potential for innovation, both for us as an automation manufacturer and for our customers in mechanical and plant engineering," explains Dr. Wolfgang Sperling, Head of the Electric Automation business unit at Festo. "Festo AX Controls enables faster and simpler integration of different automation components as well as accelerated commissioning and programming of machines and systems. The open architecture of PLCnext Technology is exactly the right basis for such innovations," explains Dr. Sperling in Festo's anniversary year, in which the company is celebrating 100 years of success in automation technology.

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Flexibler Edge Controller CEPE

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About Festo

Festo is a global player and an independent family-owned company with headquarters in Esslingen am Neckar, Germany. Festo has set standards in industrial automation technology and technical education ever since its establishment, thereby making a contribution to sustainable development of the environment, the economy and society. The company supplies pneumatic and electrical automation technology to 300,000 customers of factory and process automation in over 35 industries. Digitalization, AI and the LifeTech sector with medical technology and laboratory automation are becoming increasingly important. The products and services are available in 176 countries. With about 20,600 employees in over 250 branch offices in around 60 countries worldwide, Festo achieved a turnover of around €3.45 billion in 2024. More than 8% of this turnover is invested in research and development. In this learning company, 1.5 % of turnover is invested in basic and further training. Festo Didactic SE is a leading provider of technical education and training and offers its customers worldwide comprehensive digital and physical learning solutions in the industrial environment.