FESTO

Festo AX

Simple industrial AI solutions for maximum productivity

Industrial automation specialist Festo is making it easier for manufacturers to harness the power of digital automation and artificial intelligence (AI) to optimise process efficiency. Festo AX is a suite of AI-based software solutions enabling customers to increase efficiency in their production processes.

Festo AX makes digitalisation scalable and supports the advancement of Industry 4.0 in production. This means that manufacturing companies of all sizes can benefit from innovative technologies, while original equipment manufacturers can set up new business models immediately without the need for years of development work.

Steve Sands of Festo said: "We are excited to offer our customers this rapidly expanding range of solutions that make them more efficient and more productive. By using AI-supported tools, our customers can increase their competitiveness and take their production to a new level. Our AX latest Motion Insight Apps offer exactly that: easy-to-install, scalable solutions that enable effective implementation of predictive maintenance."

Making data-driven decisions easier

The Festo AX suite currently comprises AX Industrial Intelligence, AX Solutions, AX Industrial Apps and AX Smartenance.

Festo AX Industrial Intelligence is a project based industrial software solution that uses artificial intelligence to turn plant data into actionable intelligence. It enables users to increase productivity, reduce energy costs, avoid quality losses and — in coordination with machine builders — establish new business models. Festo AX Industrial Intelligence thus enables optimisation in three typical fields of application: Predictive Maintenance, Predictive Energy and Predictive Quality. Customer experience shows optimisation rates of over 20 percent, a clear indication of how much potential there is in deploying AI-driven data and algorithms.

With Festo AX Industrial Apps, the company is utilising its application knowledge to focus in on subsystems such as welding, glueing, riveting or packaging creating scalable solutions that allow customers to install standardised AI applications themselves without needing any AI expertise. They overcome the often-encountered gap in the application of AI that lies between the computer scientists who can model and detect anomalies in data and the real-life interpretation of the output into actionable alerts.

The latest release is the AX Motion Insights Pneumatic App. It uses machine learning AI to detect anomalies in the behaviour of pneumatic drives early and reliably, without the need for additional, complex sensor technology. This enables companies to execute preventive maintenance measures and minimise unplanned downtimes. The Festo AX Motion Insights Pneumatic App offers a user-friendly interface within the containerised app and simple integration into existing systems. It enables companies to implement the monitoring of application critical pneumatic components independently and without the need for data science specialists.

The AX Smartenance package is the ideal companion to Industrial Apps or Motion Insight packages as it offers a solution for customers' maintenance management to digitalise and simplify maintenance and servicing processes in a consistent and intuitive way. AX Smartenance closes the loop by using notification data from the AX Apps to deliver condition-based recommendations for action to the right addressee in the maintenance process at the right time. It also provides a platform for the management of routine maintenance tasks with the ability to store all machinery documentation, drawings and multi-media information such as 'how-to' videos, photographs of previous fixes and links to supplier support portals.

Industrial apps also on Siemens Industrial Edge

Festo is also part of the Siemens Industrial Edge ecosystem. The Festo AX Data Insights App, available on the Siemens marketplace, feeds data from Festo components into Siemens Industrial Edge to supply analysis applications with data. Based on this data, customers can set up monitoring within the Siemens environment to improve maintenance processes, reduce their energy consumption and improve quality. More industrial apps from Festo will soon be available via this route, including versions for AI-based monitoring of pneumatic and electric drives.

Press Images

Festo Digitalization_1

The use of data is becoming standard in automation solutions in all industry segments. Festo provides the right tools and solutions for this.

Festo GB & IE

About Festo
Festo is a leading international supplier of automation technology with a turnover in 2024 of around €3.45 billion. Festo employs over 20,000 people worldwide and is a proven innovator and problem solver in pneumatic and electrical automation, where it is the performance leader. Festo offers around 36,000 pneumatic and electric products in hundreds of thousands of variants for factory and process automation technology, many of which can be tailored to specific customer needs. Sustainability, reducing its CO_2 footprint, digital learning,

innovation, performance and speed are the key drivers for the company's future. Festo GB operates as a carbon neutral organisation and uses the PAS 2060 standard externally audited by NQA to validate this claim to customers, employees and other stakeholders.

Festo Industrial Automation's innovative strength is demonstrated through the launch of around 100 new products every year. The company invests over 8.5% of its turnover in R&D, resulting in over 2,600 patents held worldwide. For more information about the company's products and UK / Irish services, please visit: www.festo.com/gb and www.festo.com/ie

Festo and Industry 4.0 - Festo has engaged with the Industry 4.0 initiative from its inception: as a user, manufacturer and trainer. As a member of the steering group, the company has taken an active role in defining the core standards such as the RAMI model and the Administration Shell. Festo Didactic has installed Industry 4.0 Cyber-Physical Factory training hardware systems in many leading universities and training centres. It also provides Industry 4.0 training courses for change managers and practical workshops for employees. Industry 4.0 technologies such as OPC-UA communications are embedded in the latest generation products. For more information, go to www.festo.com/digitalisation

Festo Didactic training delivers training for industry – by industry. Combining Festo's industrial heritage with its future-focused manufacturing and engineering expertise to deliver courses for greater productivity and competitiveness. Offering a wide range of open courses, structured development programmes and tailor-made, customer-specific projects on technology and Industry 4.0 and the industry-leading online training suite, Festo LX. Festo also provides state-of-the-art training equipment solutions for industrial companies and educational institutions around the world. Festo Didactic has around 56,000 education customers worldwide. More information on Festo training and consulting services can be found at: www.festo.com/didactic

Festo Bionic Learning Network encapsulates the innovative nature of Festo, raising awareness and attracting talent to the company. Exploring the links between nature and technology opens new areas of innovation and demonstrates complex ideas in a stimulating and enjoyable way. Festo works with an alliance of internal R&D, external educational establishments and specialist companies to advance bionic solutions for automation applications of the future. The objective is to benefit from bionics as a source of inspiration and to realise these in industrial automation. For more information about Festo's Bionic Learning Network, please visit: www.festo.com/bionics