

SPS NUREMBERG 2025, SMART AND SAFE SOLUTIONS REDEFINE AUTOMATION

SPS – Smart Production Solutions in Nuremberg (25-27 November 2025) has confirmed its role as the global epicenter for industrial automation, highlighting a strong push towards the structural integration of Artificial Intelligence (AI), Edge Computing and Cybersecurity. With 1,175 exhibitors and around 56,000 visitors, the event marked a marked increase in the relevance and innovative strength of the industry. Italian companies, such as Bonfiglioli, Exor International, Comepi, Pneumax and Seneca, played a crucial role, presenting cutting-edge solutions.

By Editorial Staff

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The big trends

SPS Nuremberg 2025 has established itself as an essential meeting point for the global automation community, focusing on direct interaction and the development of practical solutions for real-world applications. The strong participation of 1,175 exhibitors and the turnout of around 56,000 visitors provided a positive signal for the future of the sector. The central themes of the fair were the acceleration of **digital transformation**, the optimization of *manufacturing through* smart factory *concepts*, and the need for robust and integrated **cybersecurity**. Exhibitors demonstrated how AI is evolving from a theoretical concept to an operational tool, in specific applications ranging from AI-supported quality inspection to adaptive control systems and intelligent mainte-

nance solutions based on real-time data.

The Edge Computing Domain

2025 has clearly highlighted how intelligence needs to be moved as close as possible to the data source, reducing latency and increasing operational resilience.

Exor International presented its architecture that combines hardware (HMI, gateway, edge computing) and software (Corvina). At the heart of this innovation is the **X platform**, which integrates hardware and software components for control, visualization and data collection from the machine, aiming not only at improving performance but also at creating new services and business value.

The **MicroEdge Gateway**, a Docker container-based edge device, is capable of running **XPLC** logic, the IEC 61131-3 standard Soft PLC software, which can run anywhere from the HMI to the Edge. These Edge devices, which come in versions with 32-bit and 64-bit ARM CPUs or Intel technology (Atom processor), can also run AI via Python.

A distinctive element presented at the fair was the demonstration of local AI features, such as a **facial recognition and access management algorithm** integrated into an HMI. The algorithm not only identifies the user, authorizing or denying access to the machine (e.g. if the user is “red” they cannot use the machine, if they are “green” they can enable functions that others cannot), but it does so directly on the HMI device, ensuring security and instant operational decisions without depending on the cloud.

The Corvina **cloud platform** takes care of the management of the Edge and Industrial IoT, allowing remote management of data in real time. Corvina allows you to view historical data and KPIs, such as **OEE** (Overall Equipment Effectiveness) and monitoring of **energy consumption** for sustainability and optimization of production costs. The platform supports remote device updating (OTAA) and is used to digitize processes and machines, offering consulting and platforms for the creation of new business models and after-sales services (Servitization).