Safety by WITTENSTEIN: Safeguarding productivity with safe and secure drive technology

At the SPS 2025 trade fair in Nuremberg from November 25 to 27, 2025 (Hall 4, Booth 4-221), under the motto “MOTION WITH A PLUS: SAFETY & SECURITY”, WITTENSTEIN demonstrates how the company’s mechatronic drive solutions satisfy the most stringent safety and security requirements – in applications ranging from autonomous robots to automotive cybersecurity to medical technology.

Security & Safety: In industrial environments, both safety and security are paramount – on the one hand, for ensuring machines are safe in operation; on the other hand, for establishing cybersecurity to safeguard systems and processes from hackers, manipulation and sabotage. On top of this, security of availability and productivity is also a prerequisite – with requirements for robustness, freedom from defects, and general and operational reliability.

Safety, security, guaranteed availability and productivity

WITTENSTEIN’s safe and secure solutions satisfying these requirements with superlative reliability. Here are a few examples from the group’s range of products and system solutions:

* The cyber® iTAS® system 2 drive system for AGVs (automated guided vehicles) and AMRs (autonomous mobile robots) from WITTENSTEIN cyber motor has a functional yet lean safety architecture, which meets SIL 2 and PL d requirements as per IEC 61508 and EN ISO 13849-1 as a minimum, depending on the application, providing standardized and certified safety that protects against the risk of accidents posed by machines. This simplifies collaborative work, ensures uninterrupted production processes and enhances productivity.
* WITTENSTEIN high integrity systems recently launched the Enhanced Security Module (ESM) for cybersecurity in the automotive sector onto the market. This was developed for use with the SAFERTOS® safety real-time operating system for embedded processors.
* The baramundi Management Suite and baramundi perform2work from baramundi software, which belongs to the WITTENSTEIN Group, ensure secure IT in production and manufacturing environments. These solutions enable automated endpoint management combined with real-time performance monitoring, which warns of problems before workflows come to a standstill.
* With their precise measurement accuracy in six axes, haptic sensors from the HEX product family by Resense, a WITTENSTEIN joint venture, give medical robots a human-like sense of touch, guaranteeing exceptional operational and treatment safety.

Winner of the AutomationsBest Award 2025

* The miniaturized Galaxie® actuator from WITTENSTEIN galaxie is also perfect for surgical and high-precision robotics. Its high torsional rigidity, extremely high emergency stop torque and special encoder architecture guarantee a safety reserve that is required in particular for servo axes in medical robotics.

As a result, the ultra-compact actuator was nominated in the Best Product category of the AutomationsBest Award 2025, and is one of the winners.

Pictures (source: WITTENSTEIN SE):

Ein Bild, das Text, Screenshot, Schrift, Design enthält.

KI-generierte Inhalte können fehlerhaft sein.

**01-wittenstein-safety-security:**At the SPS trade fair, under the motto “MOTION WITH A PLUS: SAFETY & SECURITY”, WITTENSTEIN demonstrates how mechatronic drive solutions satisfy the most stringent safety and security requirements.





**02-wittenstein-cyber-itas-system2-vehicle**The cyber® iTAS® system 2 drive system features a safety architecture that is both lean and functional.

Texts and photographs in printable quality can be downloaded from

<https://www.wittenstein.de/en-en/company/press/>

**WITTENSTEIN – one with the future**

With around 2900 employees worldwide and sales of €526 million in 2024/25, WITTENSTEIN SE enjoys an impeccable reputation for innovation, precision and excellence in the field of cybertronic motion – not just in Germany but internationally. The group possesses exceptional expertise for the mastery and further development of all technologies relevant to mechatronic drives and comprises six innovative Strategic Business Divisions. We develop, produce and sell products such as high-precision servo drives and linear systems, servo systems and motors as well as cybertronic drive systems for many areas of application including machine and plant construction, aerospace or oil and gas exploration. Nanotechnology and software components round off the portfolio. With 25 sites in more than 45 countries, the WITTENSTEIN group (www.wittenstein.de) is represented in all major technology and sales markets.