

Munich, 3/12/2025

Press Release

automatica 2025: innovative healthcare solutions

- **Huge growth potential for healthcare robotics**
- **Healthtech Pavilion and MedtecSUMMIT at automatica**
- **Wide application spectrum: from supporting nurses to automating labs**

Robots are taking the healthcare market by storm. Robotic systems already transplant hearts, six-axis robots work in cell and gene therapy, cobots support rehabilitation facilities and labs, and now mobile robots are moving in on aseptic environments. This development is nothing short of spectacular – and visitors to the leading exhibition automatica, held in Munich from June 24 to 27, will learn all about it.

All growth projections for robotic systems in pharmaceuticals, medical science, and healthcare point the same way: straight up. Mordor Intelligence expects an average annual growth of more than 16 percent by 2029. Even though projections can carry some level of uncertainty, one thing is for sure: The diverse healthtech sector is a tremendously promising market.

This topic will also take centre stage at automatica 2025. At the MedtecLIVE Healthtech Pavilion in Hall A4, a wide variety of exhibitors from the medical technology supply sector will be presenting themselves, covering the entire value chain. The initiative is accompanied by the MedtecSUMMIT held in Hall B4 on the second and third trade fair day, as well as by a curated selection of highly relevant exhibitor solutions.

A large number of exhibitors get inspired by the activity at automatica and showcase proven robotics, cobot, and mobile robotics solutions for healthtech applications as well as innovative assembly plants for medical devices. Stäubli

Dr. Matthias Glötzner
PR Manager
Phone +49 89 949-21483
matthias.gloetzn@
messe-muenchen.de

Messe München GmbH
Messegelände
81823 München, Germany
Germany
messe-muenchen.de



Robotics is considered an automation solution pioneer in medical science and pharmaceuticals. The Swiss company introduced the world's first Stericlean robot in 2008. This groundbreaking development paved the way to robot deployments in aseptic environments.

Robots for aseptic environments

These days Stäubli has a complete portfolio of hygienically engineered robots including four- and six-axis robots conforming to strict requirements of GMP Grade A and B isolators, RABS, and freeze driers. "We use our robots in almost all areas of medical technology. For pharmaceuticals, we have compiled a comprehensive offering consisting of three different robot series: accessPharma, the latest, is intended for non-aseptic applications, Stericlean for aseptic environments, and Stericlean+ for integration with isolators.", says Peter Pühringer, Managing Director of Stäubli Robotics in Bayreuth, Germany.

Robots capable of working in sterile environments are used in applications such as cell and gene therapy (CGT), biotherapy, API research and production, lab automation, and other sections of the pharmaceutical industry. As of now, there is just a few premium suppliers offering robotic solutions for aseptic environments.

H₂O₂ decontamination is easy for robots

Yaskawa is a manufacturer getting in on the action in this context. The Japanese company offers their hygienically engineered HD7 and HD8 high-performance robots of the Motoman series, developed in close cooperation with the Fraunhofer Institute for Manufacturing Engineering and Automation (IPA). These six-axis robots are suitable for deployment in GMP Grade A environments.

A glance towards Switzerland reveals that these machines are already being used in practice. The Swiss Pharmabotix company uses a Motoman HD8 in its CryoFiller module for automated cell and gene therapy vial filling. Here, the hygienically engineered six-axis robot handles vials and has no issues

conforming to requirements arising from the need to use hydrogen peroxide for cleaning and decontamination.

Cobots and AI are conquering lab automation

Healthtech applications also offer a wide variety of deployment options for collaborative robots, and the significance of cobots in labs, rehabilitation facilities, and many other environments is steadily increasing. The use of AI makes them highly efficient and flexible as it enables them to perfectly support researchers, therapists, and lab or hospital staff.

Cobotta by Denso Robotics is a great example that unlocks new perspectives for robot-based automation in labs. The Cobotta is the very heart of an innovative lab concept developed by the bAhead start-up from Hamburg, Germany. Rainer Treptow, CEO and founder of bAhead, explains: “We were the first to combine three disruptive technologies for lab use – cobots, drones, and AI. All system components are cost-efficient, multi-functional, and work perfectly in tune as they are controlled using swarm intelligence. This creates entirely different dynamics than in conventional lab automation, especially in labs facing the challenge of automating small numbers of samples.”

Robert rehab robot supports nursing staff

The Robert® robot has an entirely different mission. It is responsible for making patients mobile again as they recover from a surgical intervention or stroke. This groundbreaking solution by the Danish manufacturer Life Science Robotics is based on an LBR Med by KUKA. This robot is perfectly suitable for integration into the medical product thanks to its medical precertification. “With our solution, we want to help mobilize patients faster and more efficiently while easing the burden on nursing staff,” states Keld Thorsen, CEO of Life Science Robotics.

The robot’s functional principle is quite simple: The nurse attaches the robot arm to the patient’s leg, for example. Pressing the start button causes ROBERT® to raise the leg slightly. Now the nurse can manually perform the therapeutic

movements. ROBERT® memorizes this movement so that it can then perform it independently – exactly as demonstrated and as many times as required.

Even more flexible medical device production

Current developments in medical science and pharmaceuticals are not just all about robots, though. Renowned solution providers dedicated to series production of medical devices will also be represented at automatica. Inhalers, injection pens, autoinjectors, or syringes – such products can only be made by specialist companies due to patient safety requirements, among other reasons.

Apart from Teamtechnik, BBS Automation, Kahle, and Hekuma, now all part of Dürr AG, Mikron Automation is another established medtech platform solution provider. Mikron shows where the market is headed with their Maia assembly platform. The Swiss company had been known for developing powerful assembly solutions for large series production facilities before placing this semi-automated platform on a market that demands more flexibility. Maia unlocks efficient assembly processes for various medical products from a given product family such as pen injectors or autoinjectors – even with small batch sizes.

Mobile robots advance into aseptic environments

Automation of some healthcare application fields can only be achieved using mobile robots. This includes helping persons requiring assistance, but also extends to new concepts for transport and handling tasks in the pharma factory of the future.

automatica exhibitors will showcase visionary AGV and AMR solutions for such tasks as well. The deployment of mobile robotic systems in sterile environments used to be problematic as solutions for such use cases were simply not available. But that has now changed: Stäubli Robotics has made the Sterimove platform solution part of their portfolio. It is a completely encapsulated vehicle certified for use in sterile environments – the only one of its kind in the world.

About automatica

automatica is the world's leading marketplace for automated smart production. It is the trend setting event for companies from all industry sectors, providing access to innovations, knowledge, and trends with a high degree of business relevance. automatica focuses and shapes the transformation of industrial production – from automated to autonomous facilities. Messe München GmbH and VDMA Robotics + Automation, conceptual sponsor of the trade fair, are behind the industry-driven concept of automatica.

Messe München

As one of the world's leading trade fair organizers, Messe München presents the world of tomorrow at about 90 trade fairs worldwide. These include twelve of the world's leading trade fairs such as bauma, BAU, IFAT, electronica, and ISPO. Messe München's portfolio comprises trade fairs for capital and consumer goods, as well as for new technologies. Together with its subsidiaries, the company organizes trade fairs in China, India, Brazil, South Africa, Turkey, Singapore, Vietnam, Hong Kong, Thailand, and the U.S. With a network of more than 15 affiliated companies and almost 70 representations worldwide, Messe München is active in more than 130 countries. Each year, more than 150 events attract around 50,000 exhibitors and three million visitors in Germany and abroad.