

An Incredible (and Extraordinary) Machine

Festo celebrates 100 years of automation during Hannover Messe



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To mark the company's 100th anniversary, Festo designed an Incredible Machine for Hannover Messe 2025. It does not manufacture a specific product, but works on the principle of a Rube Goldberg machine, in which one impulse triggers the next. The Incredible Machine demonstrates the history of automation technology from the past to the present and reflects Festo's fascination for motion technologies (pneumatic, electric, and digital).

Just as the flap of a butterfly's wings can trigger a chain of movements, sometimes a small impulse can bring about significant changes. Festo's eMotionButterfly set the machine in motion. During this journey, visitors were treated to a look back at Festo's history as well as its future.

In 12 modules, a motion impulse ran over a total length of 14 meters, triggering a chain reaction of different motion functions in the machine. More than 1,000 Festo products and more than 1.8 kilometers of tubing and cables were installed in the machine.

Each development in the Incredible Machine represents a wing beat, followed by many more innovations. It all started with one of Festo's first pneumatic products, an electronic controller FPC 606.

Festo's automation journey began 100 years ago in a workshop in Esslingen am Neckar. Festo founder Gottlieb Stoll asked himself how technology could make work easier. From the initial production of machines for woodworking, the company developed into the production of pneumatic and electrical automation technology for mechanical engineering in a wide range of industries. Today, Festo is one of the world's leading automation specialists.

With the Bionic Flower, Festo Didactic is targeting schoolchildren to get them interested in STEM subjects at an early age. This is followed by the basics of pneumatics and electrics for apprenticeships, then data processing for technical degree subjects through to lifelong learning in professional life. A central element is the digital learning platform Festo Learning Experience (Festo LX), which effectively combines theory and practice. Learning systems such as SkillsConveyor for basic training in automation technology and mechatronics offer valuable practical experience.

During a tour at the Festo stand, Germany's Federal Chancellor Olaf Scholz congratulated the company on its 100-year success story. In the anniversary year, Festo welcomed the Federal Chancellor accompanied by Stéphane Dion, special envoy of the partner country Canada to the European Union, and Stephan Weil, prime minister of Lower Saxony to view the Incredible Machine during Hannover Messe.

Festo's representatives said innovations can solve specific problems and have the potential to change entire sectors and create new industries. The journey in the machine leads through specific industries, such as battery production for electric cars, laboratory automation in the life sciences, intralogistics and the semiconductor industry. It delves into the company's history and ends with insights into the actuator technology of the future.

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