A passion for innovation

Connectors | Robotics | Textile

US
Innovative mechatronic solutions for higher productivity

Stäubli is a global mechatronics solution provider with three core activities: Connectors, Robotics and Textile. We are an international group that currently operates in 29 countries, with agents in 50 countries on four continents. Our global workforce of 5,500 shares a commitment to partnering with customers in nearly every industry to provide comprehensive solutions with long-term support.

Innovation since the year one
Founded in 1892 as a family-owned workshop on the banks of Lake Zurich, Switzerland, Stäubli is a pioneer in mechatronics, rooted in a proud heritage of engineering. We are also a forward-thinking organization, on a continual quest for the next great innovation that will help our customers work more productively, efficiently, and sustainably.

Global presence
- 14 industrial production sites
- Presence in 29 countries through our sales and service subsidiaries, providing local support
- Agents in 50 countries
We serve customers worldwide who aim to increase their industrial productivity without compromising quality, reliability or safety.

As one of the leading manufacturers of quick connector systems, the Stäubli Group covers connection needs for all types of fluids, gases, electrical power and data. Our Robotics division is a leading player around the world in industrial automation, consistently delivering engineering that is as effective and reliable as our service and support. Stäubli Textile manufactures a range of quality high-speed systems for the weaving industry and offers personalized solutions to customers. A passion for quality and innovation, inherited from extensive industrial experience, is our fundamental driving force.
Strong industrial foundations enable us to deliver customized solutions.

Inspired engineering, avid curiosity and technical expertise motivate Stäubli to continually develop the most innovative and versatile connectors. Serving a broad range of industries, we have both standard and customized connection solutions for all types of fluids, gases and electrical power, and the expertise to support every application.

Stäubli offers technologically advanced solutions for automotive, railway, steel, pharma & chemical, aerospace, transportation, power transmission and distribution, nuclear, electronics, plastics, motorsports, alternative energies, test and measurement and other industries. Our extensive product line includes quick couplings and multi-couplings, as well as quick mold change systems and robotic tool changers. All of our products deliver high performance, quality, safety, and dependability, backed by Stäubli’s trusted reputation and global support network.

Built-in safety and sustainability
Stäubli connectors meet the highest standards in even the most demanding and competitive industries, where absolute performance, safety, durability, reliability, and efficiency are crucial.

Fluid connector systems
- Quick-release couplings
- Dry disconnect coupling
- Multi-coupling systems
- Robotic tool changers
- Mold clamping solutions
- Tool changing tables and trolleys

Electrical connector systems
- Industrial connectors
- Connectors for automatic systems
- Connectors for renewable energy
- Test & measurement accessories
- Medical industry connectors
- MULTILAM contact technology
FLUID CONNECTORS

Reliability at every connection, versatility for every application
Quick-release and multi-couplings
Stäubli connection solutions feature a versatile, modular design, enabling them to handle a wide variety of fluids, pressures, temperatures, vacuum levels, and work environments. An array of seals, valves and locking technologies makes them adaptable to a wide range of applications, including compressed air, breathing air, hydraulics, alternative fuels, thermal management, fluid logistics and more.

Robotic tool changers
Stäubli’s unique expertise in both connectors and robotics goes into making our advanced robotic tool changers systems. Relied on worldwide within automated production lines, Stäubli toolchangers help meet the increasing demand for flexible manufacturing while ensuring optimal safety.

Quick mold change systems
Known throughout the plastics industry for bringing a new level of efficiency to molding operations, Stäubli’s complete solutions, including equipment for mold loading and clamping, energy connection, parts handling and processing, minimize the downtime of set-up and logistics at every step of production.

Markets:
- Alternative energies
- Aerospace
- Machine tools
- Motorsports
- Nuclear
- Oil and gas
- Pharma / Chemicals
- Plastics
- Steel industry
- Transportation
- and many more...
ELECTRICAL CONNECTORS

Solutions tailored to the requirements of each industry
Markets:
- Alternative energies
- Power transmission and distribution
- Test and Measurement
- Railway
- E-Mobility
- Aerospace
- Automation
- and many more…

Electrical Connectors
Stäubli electrical connectors fulfill all expectations regarding advanced contact technology and sophisticated solutions covering the whole range from single parts to highly complex systems.

High performance, long-term reliability and highest mating cycles
For the connection of all types of industrial applications, test and measurements accessories as well as medical devices and installations, the safety, accuracy, and reliability of our products is unmatched. The power transmission and distribution industry counts on our long-term reliable connectors in all voltage areas. The automotive industry relies on our highly efficient connections for spot welding applications on automotive lines.

Maximum reliability in harsh environments
High current transmission, compact design, low weight and strong vibration resistance are crucial in all transportation industries. These needs are perfectly met by our products for on-board solutions in E-mobility and aerospace, rolling stock applications in railway and infrastructure connections.

Innovation and leadership
In the growing field of alternative energies, mainly in the solar industry, our products have been setting standards since the 1990s. With more than 1 billion photovoltaic connector components successfully installed worldwide, we are global market leader. The core of all of our products, the unique MULTILAM contact technology allows for highly efficient energy transmission and a long lifetime. Our portfolio, both standard and custom-made, is tailored to the requirements of many industrial applications.
Experts in Man and Machine

Our robots are designed for low power consumption and energy efficiency. Their high quality means that they will operate reliably for long periods, while maintaining precise trajectories.

Stäubli focuses on cooperation between man and machine. With that in mind, we provide not only high-performance robots to perform difficult or dangerous tasks, but also the service and support packages that go with them. We partner with customers long-term to develop automation solutions for even the most specialized needs, with a constant emphasis on productivity, minimal downtime, and exceptional results.

Interest is growing in many industrial segments for “collaborative robotics solutions” that support human operators even in difficult, dangerous or repetitive assignments. Thanks to our targeted development efforts, that vision is now a reality. Robots and humans can now work hand in hand in a safe environment with no physical obstacles.

With a comprehensive range of 4-axis and 6-axis industrial robots, power cobots and mobile robot systems as well as controllers and software, Stäubli provides game-changing solutions for a vast range of applications in all industries and market segments: food, life sciences, machining, painting, plastics, semiconductors, photovoltaics and more.
Unrivaled performance, even for sensitive environments
To meet the needs of every industry, Stäubli has developed specific professional solutions for all sectors and applications, including the following:

**General industry**
Stäubli’s high-speed, high-precision industrial robot arms are designed to optimize efficiency and boost output by automating a variety of processes, such as handling, assembly, palletizing, inspection and cleaning, even those requiring complex trajectories.

**Food industry**
In the field of automation in the food industry, Stäubli’s HE robots cut an impressive profile with their hygienic design, reliability, and exceptional uptimes. These machines excel even in mass production of open food products and can effortlessly handle a wide range of work steps, including handling, sorting, cutting and palletizing.

**Electronics and photovoltaics**
Stäubli ESD and cleanroom robots bring exceptional accuracy and speed to a variety of precisely controlled applications in the electronics, semiconductor, photovoltaic and other industries.

**Life sciences**
High safety standards, low particle emissions, easy-to-clean surfaces and Stäubli’s famous reliability have established our cleanroom and STERICLEAN robots as the standard of excellence in the medical, pharmaceutical and biotech industries, as well as in hospitals and research labs.
Weaving technology, focused on productivity

Our products and services range from weaving preparation, shedding solutions for frame weaving and Jacquard weaving, to weaving systems for carpets and technical textiles, automation solutions for the knitting industry.

The weaving industry has relied on Stäubli as a trusted solutions provider for more than a century. Our history in mechatronics gives us a strong foundation. Our passion for innovation allows us to bring leading-edge textile machinery to the market, and develop unique, individual solutions. Most importantly, our strong commitment to support ensures that our clients achieve higher productivity, less waste and better results, no matter where they are located.

Partnership: The key element
The Stäubli guarantee of high quality, reliability and performance is built into every one of our products. But helping customers meet the industry’s growing demand for high productivity requires additional support. Partnering with our customers worldwide to provide personal service and support are key to ensure efficient production and minimal downtime.
TEXTILE

Systems and solutions for most demanding applications
Markets:
Fashion and socks
Home textile
Automotive
Protection
Carpeting
and many more …

Fashion
Nearly any woven fashion application, such as elegant designer suits, unicolor to more elaborate shirting, denim trousers, outdoor sportswear or even accessories for lingerie and seamless socks that offer a sensitive wearing experience is supported by machines or automation solutions from the extensive Stäubli range for the textile industry.

Home textiles
With Stäubli systems and automation solutions, weavers can create fabrics for cozy and trendy homes: from quality mattresses, bed linen and fluffy terry towels that increase well-being to modern curtains and upholstery for exclusive lifestyles, as well as tablecloths.

Automotive
Certain auto body parts as well as the interiors of practically all motor vehicles – from floor mats to seat covers to ceiling panels – feature textile applications. Increased attention to safety has led to the introduction of airbags mounted in the sides of the seats and in the roof above the doors. Stäubli offers weaving solutions that make it possible to meet the complex requirements.

Protection
Stäubli machinery supports the creation of belts that hoist heavy payloads, parachute straps, seatbelts for safe support, slings and harnesses for free climbers and conveyor belts for transporting goods.

Floor
With its Schönherr carpet systems, Stäubli provides weaving systems supporting the creation of loop or pile wall-to-wall carpeting for high-wear areas, such as in hotels and offices, but also in transportation (trains or even airplanes) or rugs of any size, up to a width of 5.3 m.

Innovative technical textiles
Stäubli machinery for specific textiles provides the possibility of combining a wide variety of yarn materials into a fabric and the production of multi-layer fabrics with variable thickness or new types of spacer fabrics. This allows product designers of versatile branches, such as building, energy, medical, agricultural, geotechnical or automotive sectors, to create new, never-before-seen applications integrating textiles.
Optimizing processes with innovative textile machinery
Weaving preparation
Weaving mills should ensure optimal material flow. Warps should be ready at the right time, in the right number and with the required quality. Stäubli offers a range of products for automation and optimization of the weaving preparation process: automatic drawing-in machines, warp-tying and multi-layer leasing machines.

Frame weaving
Precise shedding and high speeds for all types of ground weaves, patterned fabrics, double pile weaves and technical textiles. Stäubli cam motions and dobbies master these challenges perfectly, while setting global standards and offering extreme durability with their ultra-robust construction.

Jacquard weaving
Appreciated worldwide as a leading innovative Jacquard machine manufacturer, Stäubli offers a wide range of machines operating at the highest speeds and with the utmost precision to continuously create premium fabric quality in narrow fabrics and flat and terry to carpeting and velours.

Carpet weaving
Flexibility is key for carpet weaving mills to respond to rapidly changing customer requirements. With its Schönherr carpet systems Stäubli offers weaving systems featuring leading shedding solutions. This allows weavers to choose from numerous pile and ground-weave options to offer a wide variety of carpet qualities as well as weft pattern technologies for stylish and new designs.

Technical textile weaving
With its technical fabrics weaving systems, Stäubli supports weavers in increasing their customer portfolio while partnering with non-weaving industries in creating new weaves, from complex spacer to 3D weaves and heavy multi-layer with varying thickness for any application imaginable.

Automation solutions for knitting
Stäubli offers electronic control systems for sock and hosiery knitting machines, an automatic toe-closing device for sock production, as well as production monitoring and graphic programming systems.
1892  
Founding of the company Schelling & Stäubli in Horgen / Zurich, Switzerland.

1900  
Development of dobbies for the weaving industry.

1956  
Diversification into hydraulics and pneumatics with the production of rapid action couplings.

1982  
Collaboration with Unimation Inc. / USA. Production of PUMA robots in Telford / UK.
Quality is Stäubli’s mission and driving force

Since 1892 the Stäubli Group has expanded both technologically and geographically. As early as 1909, Stäubli set up its first manufacturing site in France, followed by further expansions to European countries, the Americas, Japan, China, India and Korea. Having started off as a technological pioneer and reliable partner in the weaving industry, Stäubli expanded its expertise to connection solutions, first with quick couplings for pneumatics and hydraulics and afterwards for electrical power and data. With the acquisition of Unimation – a renowned pioneer in industrial robotics – Stäubli continued its dynamic path into one of the most advanced and innovative industrial sectors. On the basis of this comprehensive technological heritage and expertise, we partner with our customers worldwide to provide the most efficient solutions for their application.
Global presence of the Stäubli Group

www.staubli.com