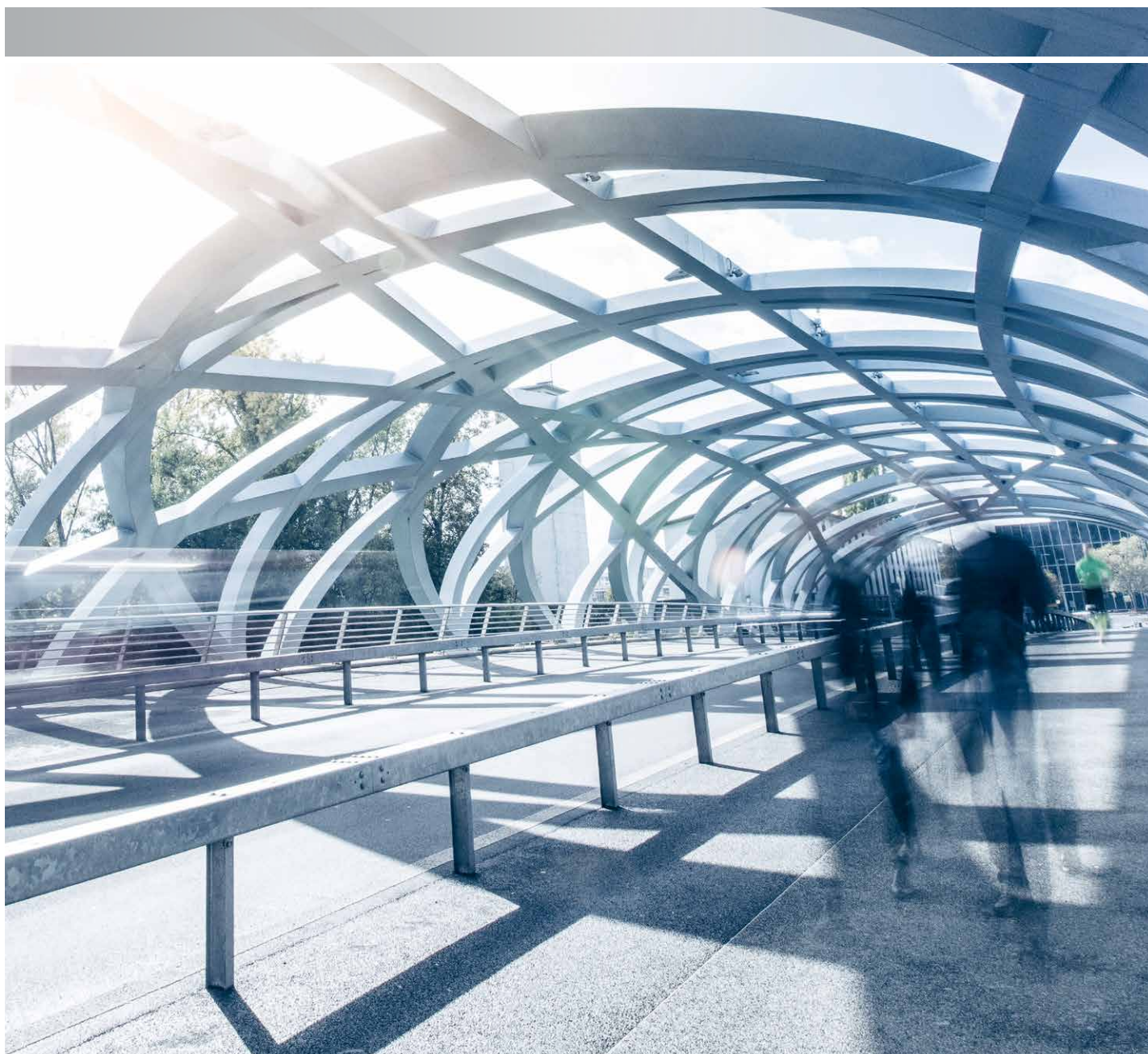


# Advanced connection solutions

Connectors

EN



## OUR ACTIVITIES

# An international group serving all industrial sectors



**The Stäubli Group serves customers worldwide who aim to increase their industrial productivity whilst maintaining quality, reliability or safety on the highest level.**

As one of the leading manufacturers of connector systems, Stäubli Connectors 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 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 long industrial experience, is our fundamental driving force.

**Customer proximity means we maintain a strong global network worldwide.**



**5500**  
employees  
worldwide



**600**  
R&D specialists



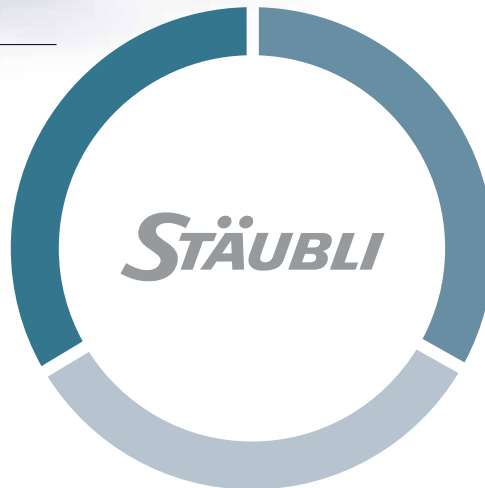
**2100**  
granted or pending  
patents

## Robotics



## Connectors

Fluid Connectors  
Electrical Connectors



## Textile



Over  
**20**  
industrial  
segments



**14**  
production sites



Over  
**60**  
locations in 29 countries  
agents in 50 countries



FARSIGHTED PARTNER

# Engineering your vision



**The role of a leader means having a foresight of the future, predicting technological developments and the emergence of new fields of applications. This prediction must be associated with careful consideration of the practical needs of the users. This overall approach enables Stäubli Connectors to successfully meet its customers' demands for their higher productivity.**

The international nature of the Stäubli Group combined with the expertise in a substantial number of widely varied markets enables us to offer a broad range of connection solutions for all types of fluid energy and electricity. Our extensive product line includes quick-release couplings, single- and

multi-pole connectors, multi- and modular hybrid connection systems as well as quick mold change solutions.

The product ranges are versatile and offer a wide variety of fluids, pressures, temperatures, vacuum levels, electrical power, signals and data, regardless of the work environment.

Stäubli connectors deliver performance while ensuring operator safety, reduce running costs and increase productivity. All our connection solutions meet the highest standards in even the most demanding and competitive industries.

**As a forward-thinking organization we are moving ahead.**

## ADVANCED TECHNOLOGY

# Cutting-edge solutions to meet your requirement



**We offer more than 200 product families; representing several tens of thousands of personalized part numbers covering a wide range of applications.**

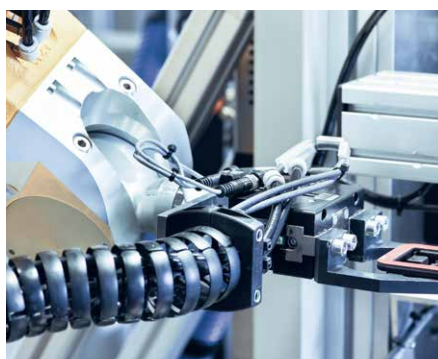
**Stäubli offers technologically advanced solutions based on the passion for innovation and dedication to product efficiency and user safety. Each Stäubli assembly is engineered and built from parts of consistently matched quality and design.**

A global network of specialists with in-depth industry knowledge supports our product development. Inspired engineering, avid curiosity and technical expertise motivate us to continually design the most innovative and versatile connection solutions worldwide, which are brought to life in our own manufacturing sites.

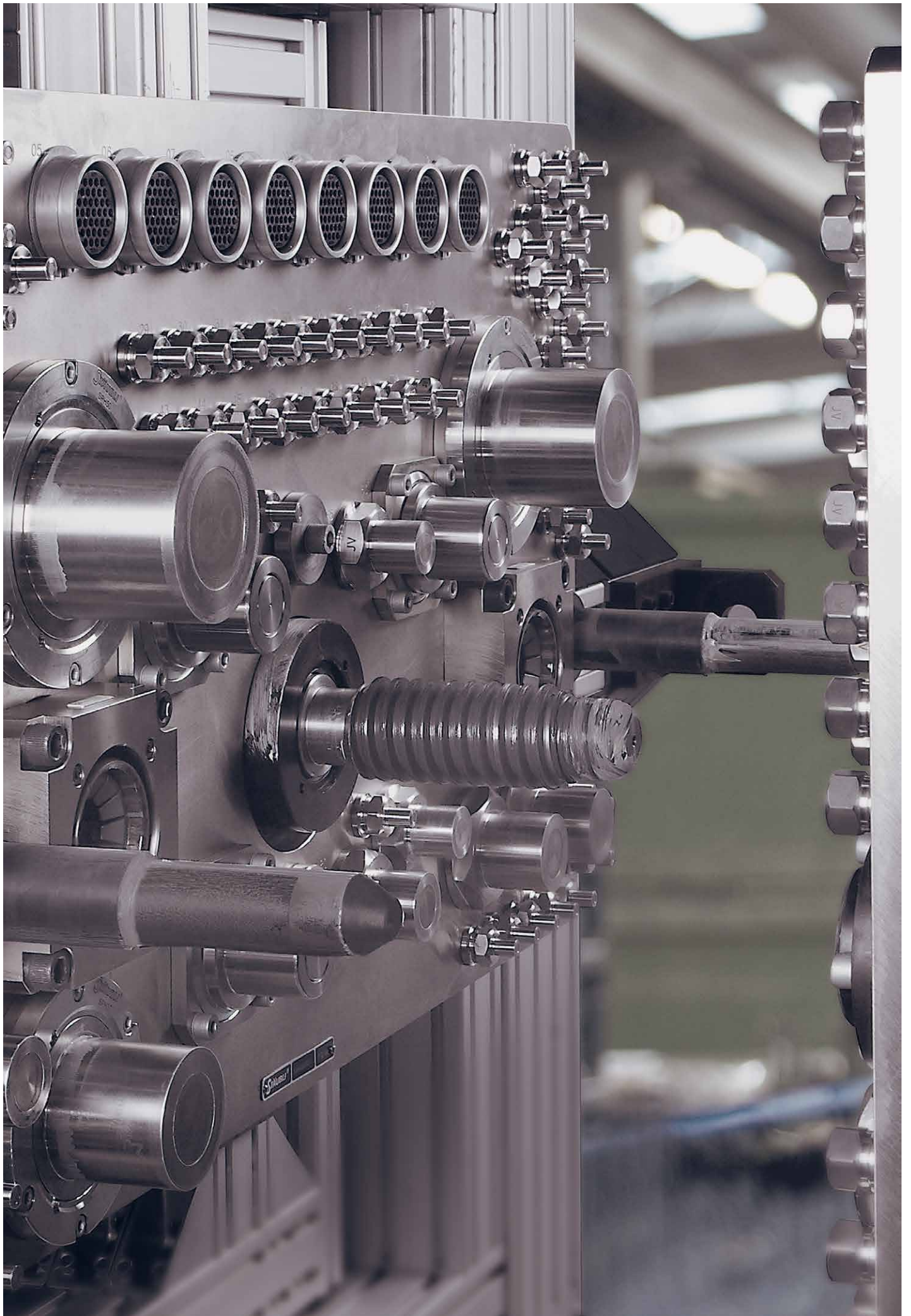
### **Quality and innovation**

Stäubli's commitment to quality and innovation is inherited from our long industrial experience. This guarantee of reliability has become part of our brand signature. Combined with our search for cutting-edge products and solutions at the highest operational safety, we develop leading mechatronic solutions to increase the productivity of our customers' business.

For example, the unique MULTILAM technology has been invented by ingenuity and is now the core of all electrical connectors of Stäubli, allowing for highly efficient energy transmission with the lowest contact resistance and a long lifetime. Thus, innovation is the driving force, which supports us to start trends and set standards in any product range.







## UNLIMITED APPLICATIONS

# A solution for every requirement



### Each connection solution needs specific, diversified and accurate features.

While perfect seal-tightness of the fluid couplings or the high current carrying capacity of the electrical contacts are key requirement, the specifications of each application must also be taken into account.

Whether the area of operation shows specialties such as highest or lowest temperature, vibrations, challenging environments, special handling, given applicable standard or others, you benefit from our broad experience. Our background, gained from Stäubli's presence in markets with a wide scope of requirements, enables us to provide you with solutions adapted to real-life uses.

### Each sector has its own challenges

- Ensuring the safety of people and assets in sensitive environments
- Increasing productivity and optimizing processes
- Withstanding difficult climatic and environmental conditions and mechanical stresses
- Providing unfailing, sustainable durability

## TRANSVERSE EXPERTISE



Photovoltaics



Machine tools



Steel



Electronics and communication



Motorsports



Pharmaceutical and biotechnology



Power Transmission and Distribution



Renewable energies



Aeronautics



Chemical



Oil and gas



Nuclear



Railway



Automotive



Plastics



Test and measurement



Food



Medical



E-mobility

## GENERATING INNOVATION

## QUICK-RELEASE COUPLINGS AND SINGLE-POLE CONNECTORS

# A guarantee for safe and long-lasting operation



**Reliable and long-lasting quality components help to reduce running and maintenance cost whilst providing safe and secure operation.**

Stäubli is a recognized expert in safe, reliable and quick connections of fluids, gases, hydraulic and electrical supplies. Whether your requirements call for a clean break, safety, full flow couplings or lowest electrical contact resistance in power transmission with the highest performance, we offer a wide range of standard and customized quickrelease couplings as well as highly specialized electrical connectors for all types of circuits and applications.

Our connections meet the requirements of both the most common and most demanding applications. Modular, configurable and extremely effective, they take into account the conditions of use as well as the specific features of the fluid, gas, electricity or signal being transported.

### **Quick, safe and long-lasting connections**

They have been designed to maintain their initial characteristics over time. Some connections are connected and disconnected several dozen times per hour and many thousands of times per lifetime. The

Operation must always be quick, easy and safe, regardless of the function and work environment.

Stäubli's product ranges are versatile and go with a wide variety of fluids, pressures, temperatures, vacuum levels, electrical power, signals and data. They fit with a wide range of applications, such as compressed air, breathing air, hydraulics, alternative fuels and e-mobility, cooling of electronics, temperature control, fluid logistics, photovoltaics, measurement and testing, power transmission and distribution, and many more.

**"By choosing a range of quick-release couplings that provides unfailing tightness, we have been able to transform our air cooling system for electronics into a water-based process."**

Steven W.  
Product Manager, Electronic module manufacturer



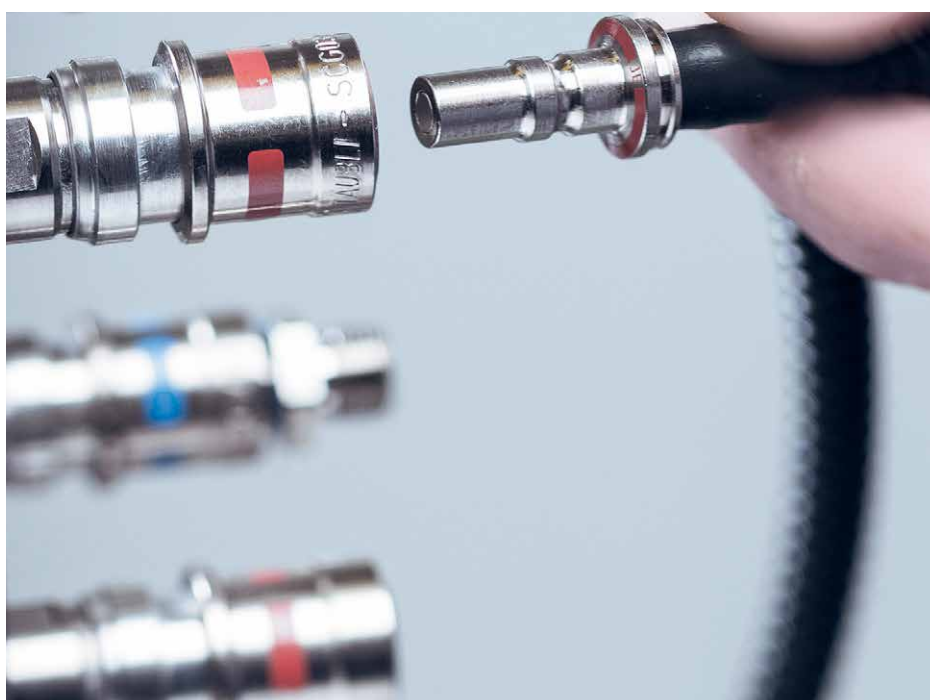


### **Conventional and alternative energy transmission**

Stäubli has pioneered and set the market standard in Photovoltaic connection solutions and is now the global market leader in this field. Safe and efficient products along with the whole electrical supply chain provide dependability and zero maintenance to increase the bankability of PV-projects. From small to large components, Stäubli electrical connectors are suitable for use in areas of low, medium and high voltage transmission.

### **Testing and measuring equipment**

Furthermore, there is a vast range of insulated accessories for measuring, testing or diagnosis of components and systems offering highest dependability and repeatability even in high-frequency engineering.



**“The principle of MULTILAM has made a major contribution to the reliability of our equipment, despite very high mechanical stresses and high temperatures, while still complying with our space limitations.”**

Antoine F.  
Engineer, Railway manufacturer



## MULTI-COUPPLINGS AND MULTI-POLE CONNECTORS

# Modular connections with manifold talents

**Stäubli's broad experience in connection applications have enabled us to develop both manual and automated multi-connection systems for diverse industrial fields. As every application deserves an individual, tried and tested the answer, modular and configurable connection systems provide you with an all-in-one solution.**

The concept of centralized energy connection systems help optimize efficiency and safety in many processes. The automated solutions also, provide a perspective to factory automation of the future. Our modular multi-connection systems combine all circuits: electrical power, signal, data, thermocouple, coaxial, fiber-optic, fluids, pneumatic and hydraulic.

Based on this modularity, our solutions are easily adaptable and expandable according to your requirements. These connections are qualified even for use in demanding environments.



### Manual centralized connections

As one of the pioneers in this field, Stäubli has developed this concept to connect a number of fluid and/or electric circuits simultaneously. With a wide choice of options and configurable models, the manual multi-connection ranges cover infinite applications. The vast variety of Stäubli components enables you to create standard or personalized configurations allowing for combining of all types of energy transfer.

### Compact hybrid solutions

These systems perfectly fit for applications that require both space-saving and quick connections. They provide all types of energy transfer in one single compact frame or housing. Stäubli's modular and individually configurable hybrid connection solutions are reliable interfaces, guaranteeing robust and durable operation even with high mating cycles.



## MULTI-COUPPLINGS AND MULTI-POLE CONNECTORS

# High performance for automation solutions



**Stäubli has become a proficient engineering partner for manufacturers, enhancing the productivity of automated production lines. The product range includes production as well as testing equipment, e.g. automatic tool-changers, multi-pole connectors for docking systems, multi-coupling systems and connectors for welding guns.**

### **Automatic multi-connection systems**

The automated type of multi-connection solution provides significant productivity gains and enables effective work-space optimization. Without human intervention in the production line, operation safety can be increased in sensitive applications.

### **Robotic tool changers**

With expertise in both energy connection and robotics, Stäubli designs high technology tool changers. Building an interface between the robot and the tool, they enable quick, reliable and safe changing of tools. These systems are modular, compact and not only extremely efficient, but they also fulfill the requirements for productivity and for safety in automated production lines, for all payloads.

### **Connectors for docking systems and robotics**

With its range of electrical connectors, Stäubli is market leader in primary circuit connectors for welding robots in the automotive industry. A new standard in this industry has been set by our solution, suited for the use on all relevant robot interfaces in order to substantially enhance productivity. Small in size but big in performance, the automatic systems connectors feature a rugged and reliable design specifically engineered for high mating cycles as well as for a quick and easy maintenance.

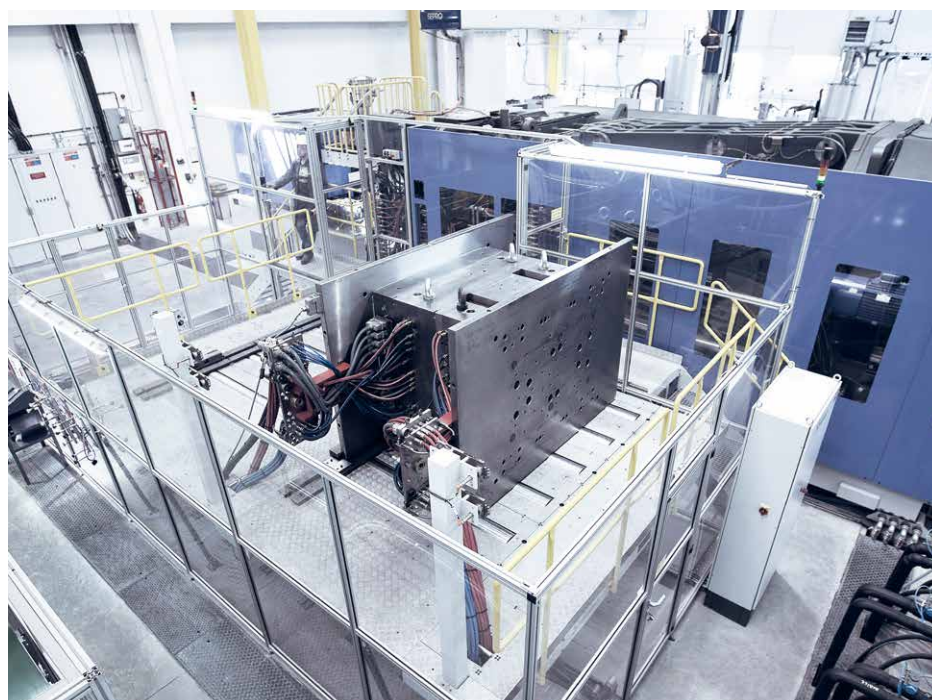
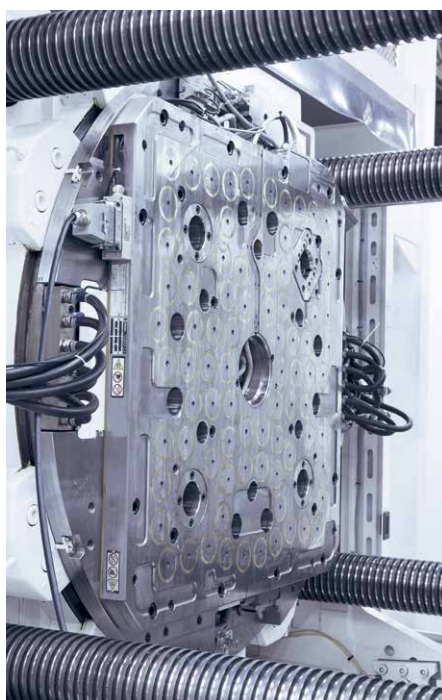


**“The solutions developed by Stäubli have fulfilled our challenges in diversifying the tasks carried out by our robots. Essentially, it’s our flexibility and productivity that has been optimized.”**

Gerhard M.  
Supply chain manager, Automotive industry supplier

## QUICK MOLD CHANGE SOLUTIONS

# Enhanced productivity and increased safety



**Stäubli's product ranges offer significant cost savings by reducing down-times and logistics interventions. With decades of unique expertise in the plastics industry, our specialists will advise you regarding the choice of the best solution and support you in your SMED (Single-Minute Exchange of Die) or Industry 4.0 projects.**

### **Mold clamping systems**

Depending on your specifications, such as press size, loading method, mold selection or frequency of production changes, we offer you the most suitable clamping technology – be it mechanical, hydraulic or magnetic.

### **Mold loading tables and carts**

Whatever your specific needs are, our individually designed loading solutions significantly reduce the installation and tool

changing times. In line with the installations and processes involved, Stäubli's solutions can be static or mobile, automated or manual for all types of press.

### **Mold maintenance stations**

Optimizing maintenance while improving production quality and safety, our stations facilitate the inspection of all functions and components in your tools in the best possible conditions.

### **Mold preheating solutions**

Preheating the molds to the right temperature before production makes them immediately operational and offers significant time savings. Stäubli's centralized connections rapidly and simultaneously supply molds with all fluid and electrical energies. For maximum efficiency and productivity, this solution can as well be directly integrated into our loading tables.







## ENGINEERING EXPERTS AT YOUR SERVICE

# People make the difference wherever you are

**The links between our staff and the users are essential connections as well. Working closely with our customers, both conceptually and geographically, even for most uniquely demanding tasks, we enter into a longstanding partnership with them.**

### Taking care

Our customers' requests or project requirements are processed quickly, creatively and competently. These collaborations motivate us to move forward and constantly improve our products and services.

### Expert know-how

Our solutions have acquired a worldwide reputation for excellence, thanks to this close proximity to our customers and thanks to a thorough knowledge of the specific features of each market. We steadily develop standard connection solutions which can be adapted or personalized in line with our customers' projects and needs.

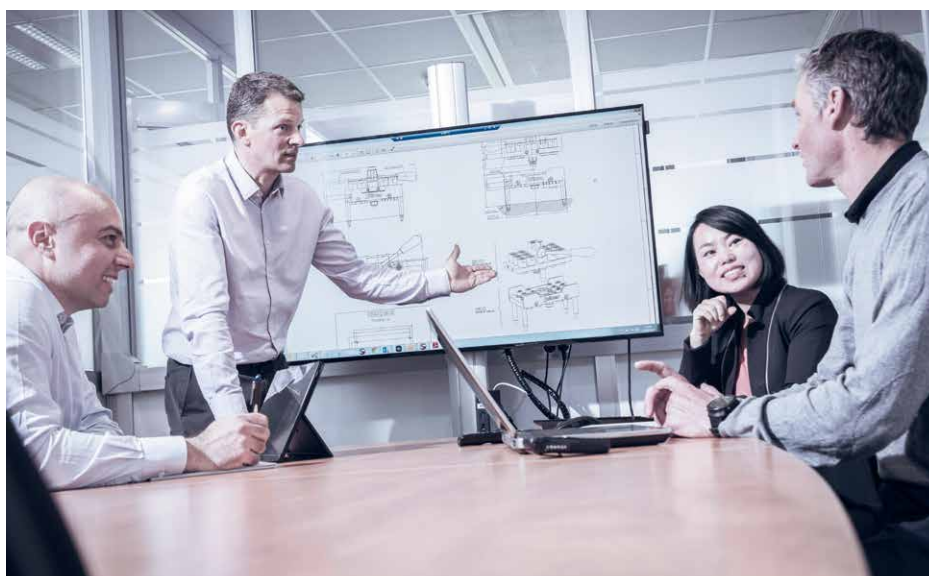
### At your service

Whatever your field of activity, wherever you are located in the world, our specialists are there to help you, to provide advice and to intervene immediately, answering your questions and helping you to prevent downtime.

Throughout all phases of the project development, implementation and operation, Stäubli's expert personnel are alongside with you. Our objective is a seamless application of our solutions into your existing operations. We make sure that you benefit from increased efficiency and productivity.

**"Choosing Stäubli for our projects isn't merely a question of product range. It involves choosing a partner who really knows our business; one that listens to our needs."**

Yong Z.  
Project manager, Original Equipment Manufacturer



**"It's very reassuring to work with a company that anticipates actual needs and which has an overall insight of our requirements, being alongside with us in all project phases."**

Olga R.  
Production Manager, Industrial manufacturing company



■ Stäubli Units    ○ Representatives/Agents

## Global presence of the Stäubli Group

[www.staubli.com](http://www.staubli.com)