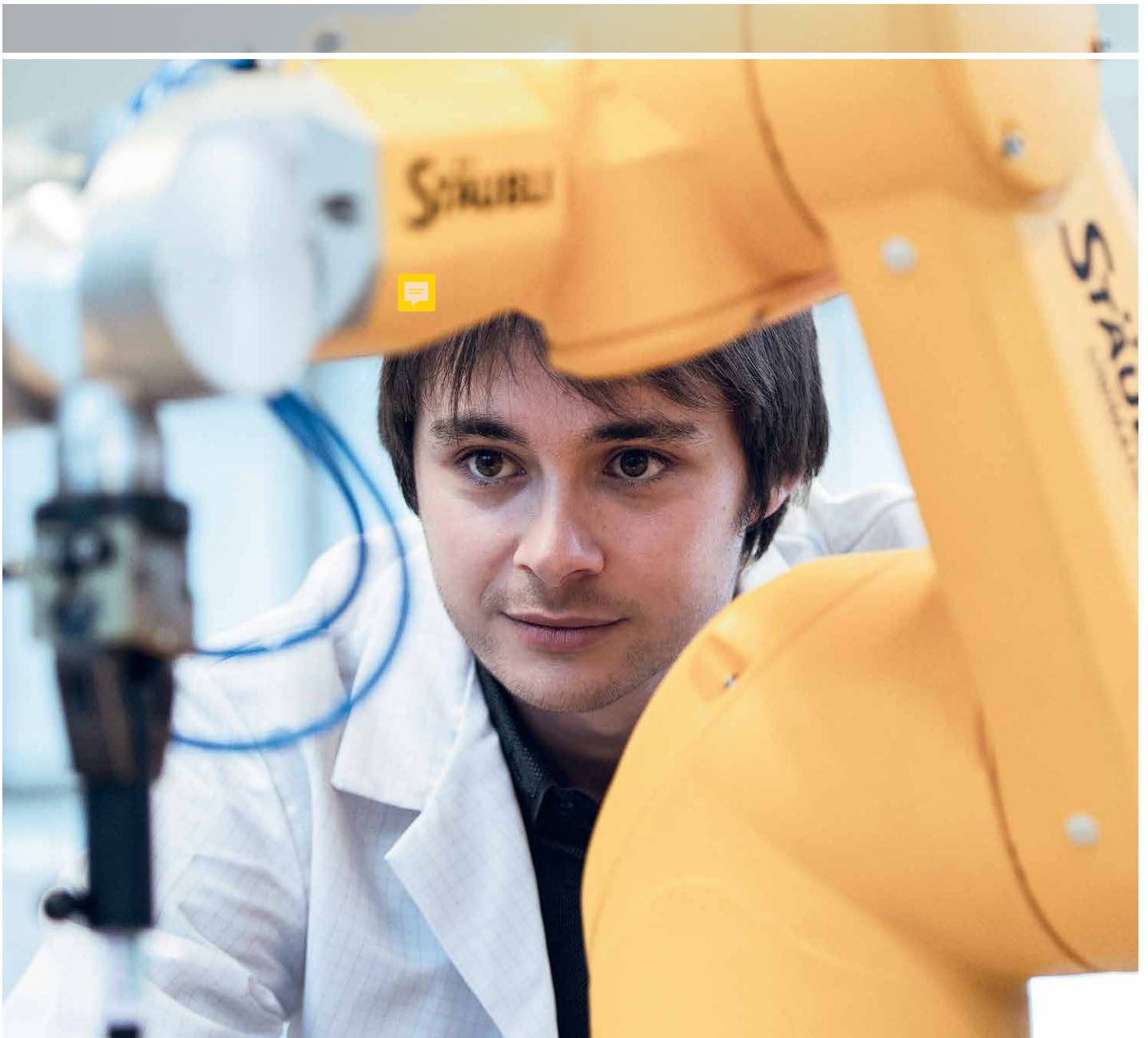


FAST MOVING TECHNOLOGY

STÄUBLI

Experts in Man and Machine

Robotics



OUR ACTIVITIES

An international group serving all industrial sectors



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 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

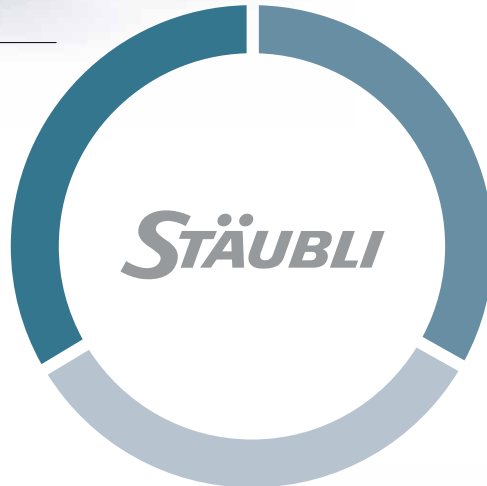
granted or pending
patents

Robotics



Connectors

Fluid Connectors
Electrical Connectors



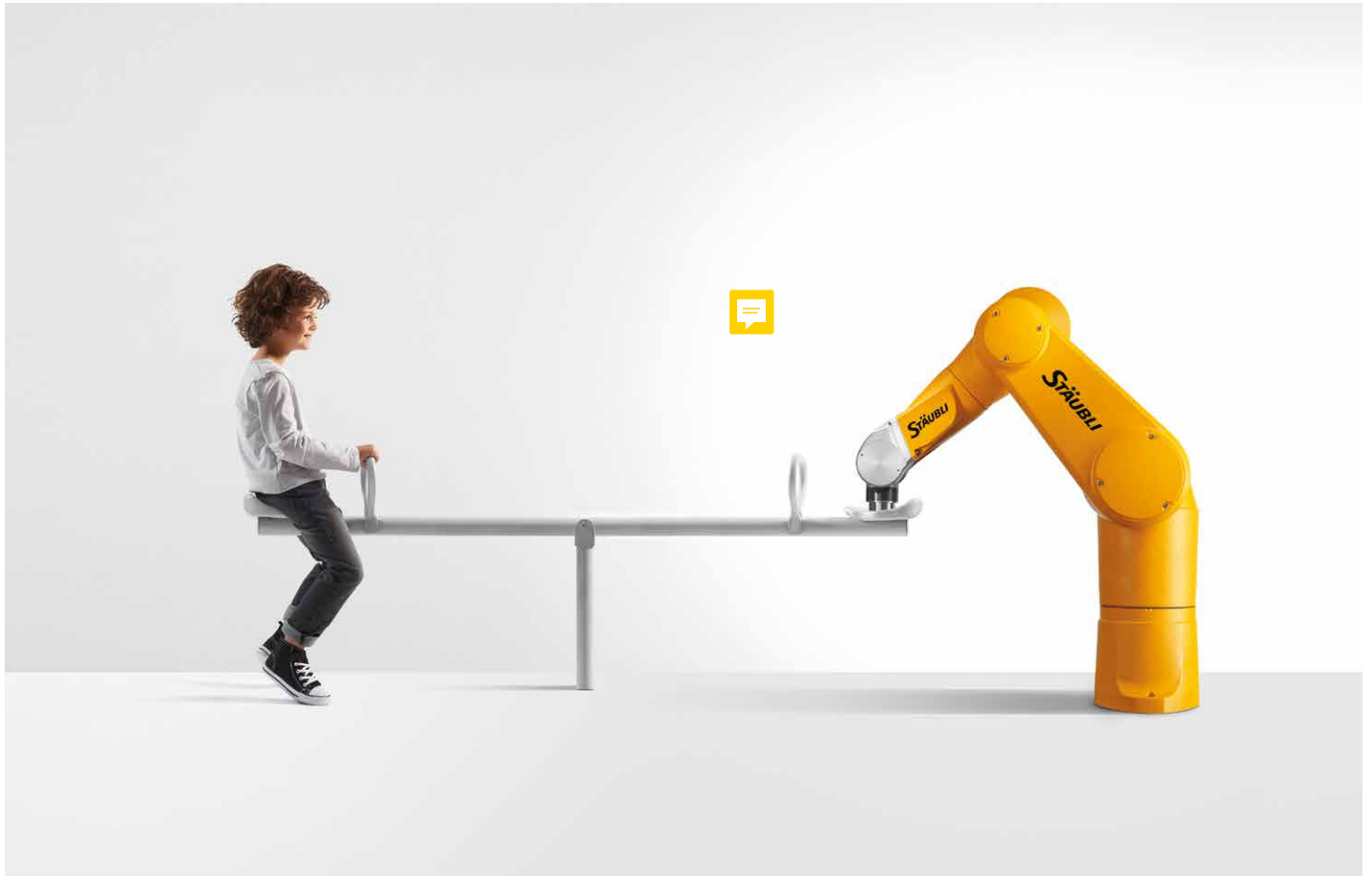
Textile

Over
20
industrial
segments

14
production sites

Over
60
Locations in 29 countries.
Agents in 50 countries.

What if robots (truly) worked with humans?



Today, our robots work both for, and with, people.

The benefits of robots in the industry are no longer in doubt: every year, robots join new sectors and their “population” is growing around the world.

As they become smarter and perform better, they are finding a place in the production alongside humans. But what exactly is

that place? And what is the vision behind their work? Humans and robots must work together like a team and not like competitors. Robots should work for the benefit of humans, to spare us tedious tasks and eliminate safety constraints. Eliminating barriers in everyday work, helping humans maintain full control over operations, and adding value to human work within companies, no matter their size or business—that is Staubli’s philosophy.

People drive change. Robots accelerate the pace.



INNOVATION AND LEADERSHIP

Descended from industrial excellence. Oriented toward the future.

Formed when Stäubli’s industrial activities diversified in the early 1980s, our robotics business has carried on the company’s mindset of excellence in a field that was nascent at the time. Working together with one of the sector’s world pioneers, Stäubli Robotics developed an innovative philosophy toward its business, providing every business sector

around the world with mechanical solutions; control and command systems; customized, reliable, scalable software; and efficient, responsive service.

To do so, we employed all our skills and expertise to strictly uphold the high quality of our products.

Robotics business



100+
robots models on the market



10%
of revenue is invested into research & development



MARKETS AND APPLICATIONS

Robots designed for every application and every industry

Stäubli robots are the best solution for any industry requiring speed, precision, and reliability. To satisfy our customers' needs, Stäubli Robotics develops specialized, professional solutions for every industry, including electronics, medical, automotive, food, plastics processes, mechanics, and even painting.

Stäubli robots are effective under any condition. They are designed to work in the most sensitive of environments or meet cleanroom standards.

Yet they never compromise on performance.



Automotive



Electronics



Food



Intralogistics



Medical
Pharmaceutical



Metal
Machine tools



Photovoltaics
Semi conductor



Assembly



Cleaning
Washing



Handling



Machine loading /
unloading



Measuring
Quality control



Packaging

OUR ROBOT LINE

A unique line of 4- and 6-axis robots



Standard line

Stäubli Robotics features a unique, comprehensive line of 4- and 6-axis robots. All of our technical qualities—compact arms, a broad work envelope, rapid, precise movements, and a tolerance for any work environment—can be found across the line.



4-axis
TS2 line for assembly and pick-and-place operations.



6-axis
TX2 line for any application, thanks to its closed structure and high dexterity.



FAST Picker
TP line for all high-speed packaging applications.

Specialized line

These lines are built to specific requirements for use in sensitive environments (clean-rooms, humid, sterile, or aseptic environments, electrostatic discharge, paint, food, machining, etc.).



ESD
4- and 6-axis line for electronics applications.



Stericlean
6-axis line for pharmaceutical research and production.



HE
6-axis and FAST Picker line for applications in humid environments.

HelMo mobile robot system

The HelMo mobile robot system is an autonomously driving and navigating vehicle. Three integrated laser scanners are permanently monitoring the system's surrounding and ensure precise navigation and safety. In combination with the TX2 robot and the CS9 robot controller including features like safe speed, safe stop and safe zone/safe tool,

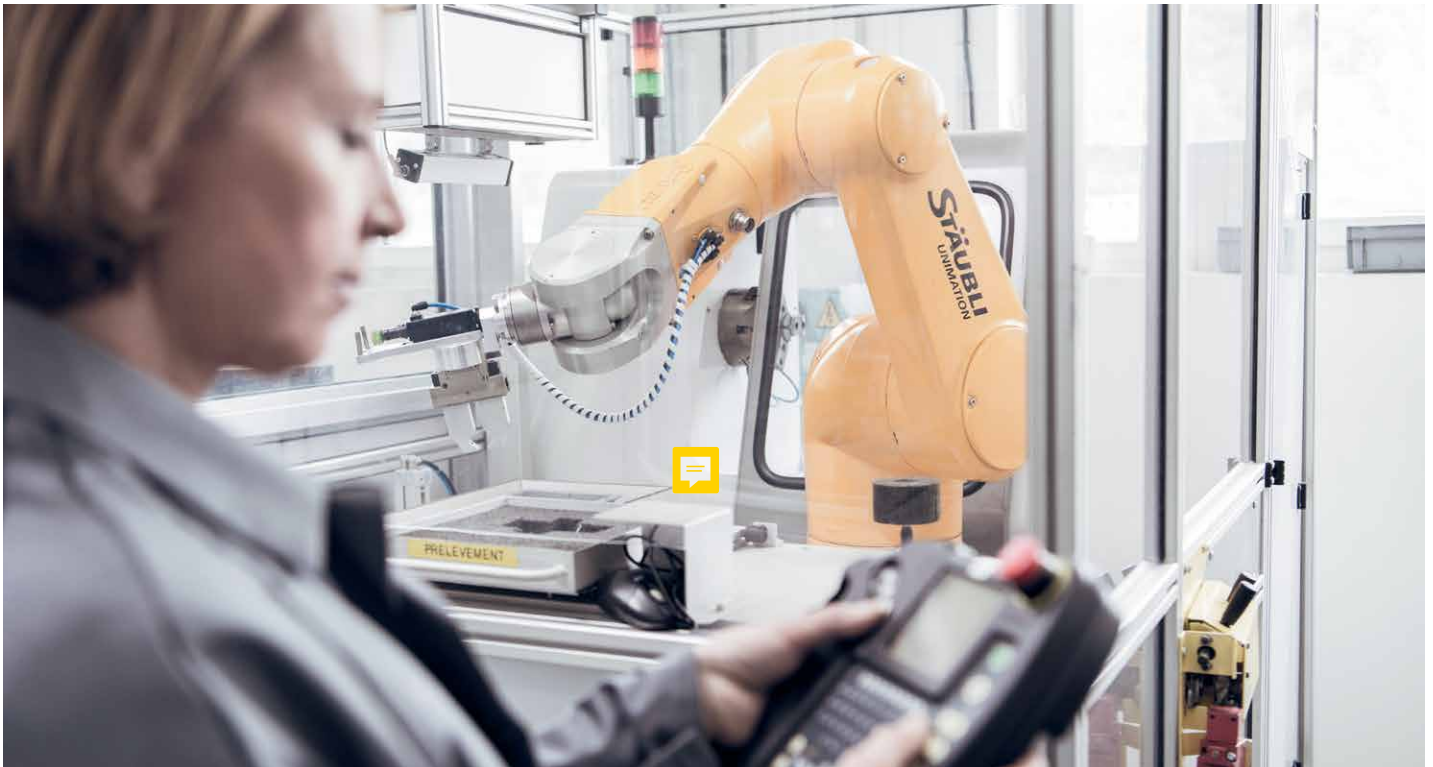
a safe collaboration is guaranteed. Thanks to its modular structure and robust drive technology it can be used in almost every industrial sector like provisioning, logistics, assembly or quality control.

Even more, the system charges during its work by connecting itself to a docking station.



SOFTWARE SOLUTIONS

Simple, comprehensive, powerful solutions



Like our robots, Staubli's software solutions are designed by first analyzing the technical and financial conditions for which they are intended.

On the technical side, our software factors in the operations systems and devices currently in use, to adapt to existing infrastructure without disrupting a business's processes.

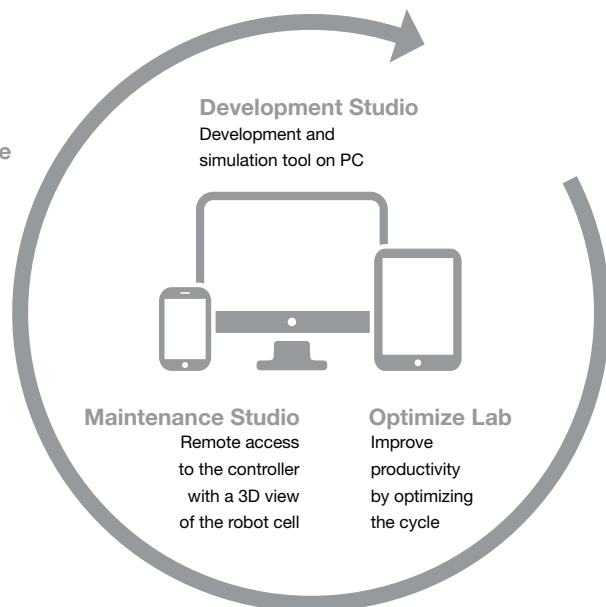
On the financial side, our development tools employ the best productivity solutions long before a robot is even chosen. The analysis includes a look at production and maintenance parameters. This allows you to maintain control over your robotics tools throughout their lifespan.



Maintenance



Design



Development Studio

Development and simulation tool on PC

Maintenance Studio

Remote access to the controller with a 3D view of the robot cell

Optimize Lab

Improve productivity by optimizing the cycle



Production



Installation



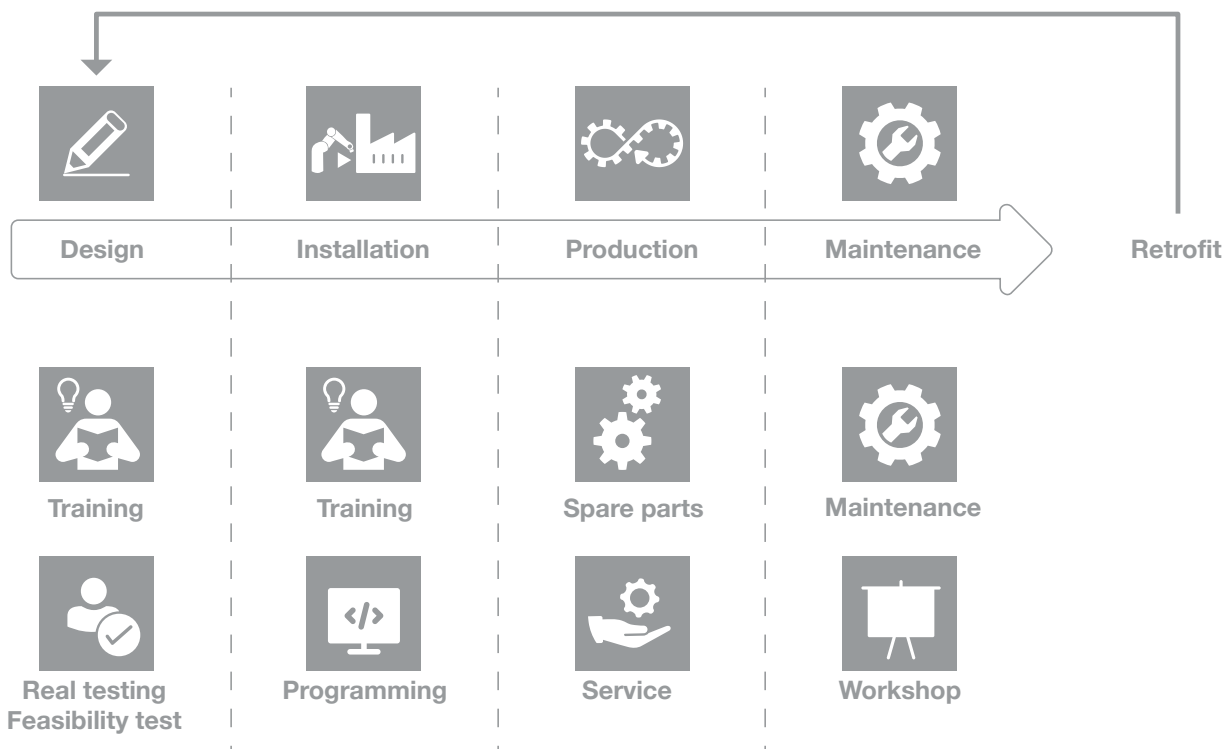
SERVICES

An essential complement to a quality robot



The correct choice of a robot's power and options and a prior assessment of its integration is essential to getting the most out of your robot. Operator training and responsive troubleshooting also help optimize productivity. That is why, for every aspect of a robot's life on the production line, Staubli has teams available that fully understand both their product and the needs of your business. Whether presale, onsite, or remotely, our teams are always ready and available.

Comprehensive assistance throughout the production cycle

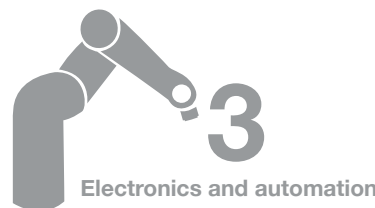
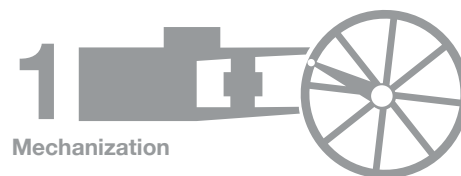


INDUSTRY 4.0

Factory of the future: challenges for industrial robots

The first industrial revolution involved mechanization using steam; the second revolved around industrialization and mass production using electricity; and the third created automation using early robots to replace humans in repetitive or dangerous tasks. Industry 4.0 is the fourth industrial revolution, a technological leap where general automation meets computerization, completely transforming production sites (with interconnected resources that communicate with each other).

The fourth industrial revolution



Manufacturers around the world are constantly seeking to optimize their organization, management systems, and even their relationships with suppliers.

Industry 4.0 meets this challenge by introducing a new way of working, accelerating the convergence of the virtual world with the real one.

Having gradually computerized their work tools, factories have succeeded in networking their industrial production systems to-

gether, from the manufacturing stage up to the storage, distribution, and sales stages, forming a new ecosystem that communicates in real time.

An opportunity for Stäubli Robotics

The mission of Stäubli Robotics is to offer our customers the best possible robotics service. To do so, our company designs robots that communicate with each other and adjust production to meet demand, all while affording as much flexibility as possible.

Our CS9 controller, which controls all of the robots in our TX2, TS2 and TX2touch lines contains all web functionalities and allows users to bring up real-time production information on smartphones and tablets. Because the entire system is interconnected, users can personalize the production according to their needs.

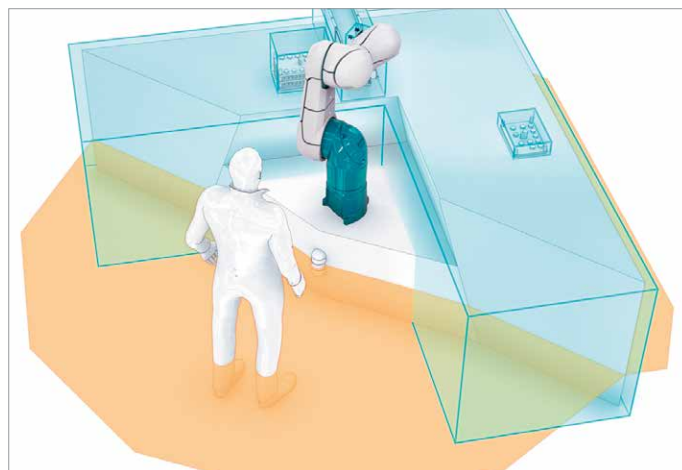
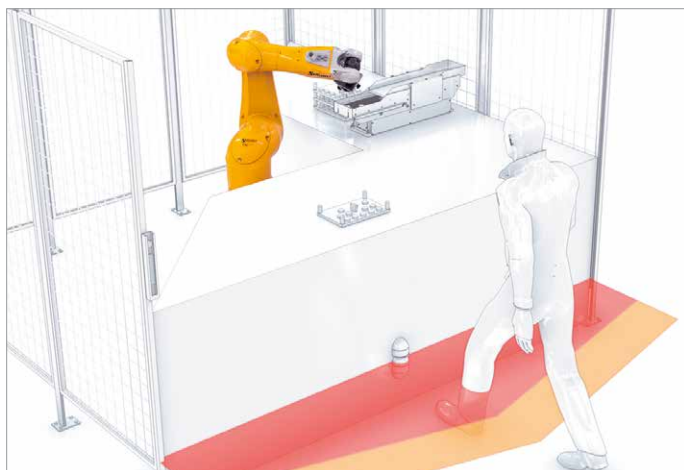
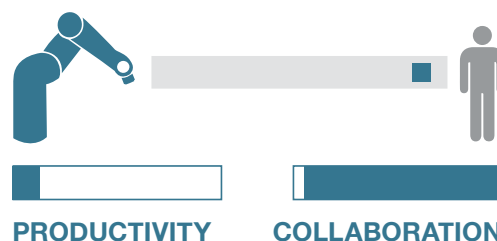
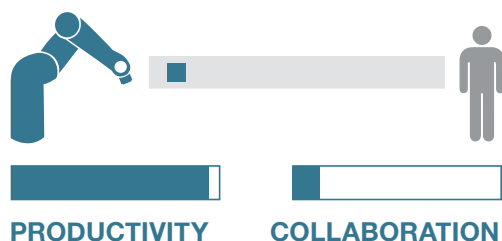
EXPERTS IN MAN AND MACHINE

High productivity and safest collaboration

The TX2touch is a unique range of power cobots designed for safe Man Robot Collaboration while maintaining high productivity. Based on the proven TX2 industrial robot, it offers safe operation thanks to its advanced skin technology, quick reaction time and embedded modular safety functions. TX2touch is the only cobot with the SIL3/PLe safety level. It is highly productive due to the performance, smart connectivity and reliability inherited from TX2 robots and its CS9 controller.



Thanks to the combined use of a set of 5 unique modular SIL3-PLe safety functionalities, the TX2touch cobot range is the safest on the market while maintaining a high level of productivity.





SUCCESS STORIES



Stäubli and Hager: two companies of the same mind

Hager, a world leader in electrical equipment and home automation believes that product quality comes from maintaining full control of the manufacturing process. Its philosophy is very similar to Stäubli's, leading to a highly successful partnership between the two companies.

Taking over dangerous, repetitive tasks

The manufacture of electrical contacts involves the insertion of cables, a process that used to be performed manually. But the repetitive movements caused repeti-

tive strain injuries, leading Hager to switch to the use of robots. Operators were then able to work on more valuable supervisory tasks. Ergonomics and productivity go hand in hand.

Solutions that work on any continent

Hager also chose Stäubli robots for our ability to create uniform processes across all of Hager's units worldwide. Stäubli's size and international presence helped Hager guarantee identical results across all production sites.

"Hager has always invested a great deal into robotics and updates its equipment regularly. In addition to the obvious technical benefits, Stäubli robots help us modernize and make us proud. Our teams are happy to welcome their new 'coworkers' with open arms."

Bruno Kauffmann
Director of Industrial Solutions at Hager



Scan the code
to watch the video



Automotive/Germany

Continental

In 2012, tire manufacturer Continental chose to automate the phases of its prototyping process to save time and increase profit repeatability. With the help of integrator ReconRobotics, Continental developed an automated system equipped with a Stäubli RX160 6-axis ultra-precise robot that measures, marks sculpts, and drills tire treads. As a result, the plant reduced its programming and configuration time by 50% and was able to attain precision on the order of 0.2mm, even with high loads during cutting. Thanks to its accuracy, the robot improved performance and the precision of repeatability for tire treads—a leg up toward future development.

1,500
units produced in 2016

50%
savings in time spent on 3D programming and configuration

0.2mm
degree of precision



Food/China

Fu Ling Zha Cai

Chinese company Fu Ling Zha Cai, a specialty maker of mustard pickles worked with integrator Jiadi Mechanical to create a pioneering production chain using multiple TP80 FAST Picker robots working in series. The improved overall arrangement yielded impressive results: a clear increase in production, a tangible reduction in costs, better quality, and maximum equipment uptime. In sorting and packing operations, the high-tech robotic solution contributed a great deal to the cost-efficiency ratio and allowed workers to abandon monotonous tasks in favor of more skilled ones.

110
units per minute: cycle time

33
robots used at the production site



Pharmaceuticals/United States

National Institutes of Health (NIH) in Rockville

Out of 7,000 childhood diseases, only 500 are treatable. To test potential treatments for the remaining 6,500 incurable childhood diseases, the NIH in Rockville, Maryland, invested in a robotic solution. The NIH is equipped with Stäubli RX160 robots and relies on their speed and precision to perform large-scale tests. In just one week, the robotics systems perform millions of experiments faster and more precisely than a human could. It would take a person 12 years to perform the same amount of work that the robot does in one week.

3 million
tests performed each week

450,000
different chemical components tested each year

12 years
7 days a week
time it would take for a human to perform the tests

