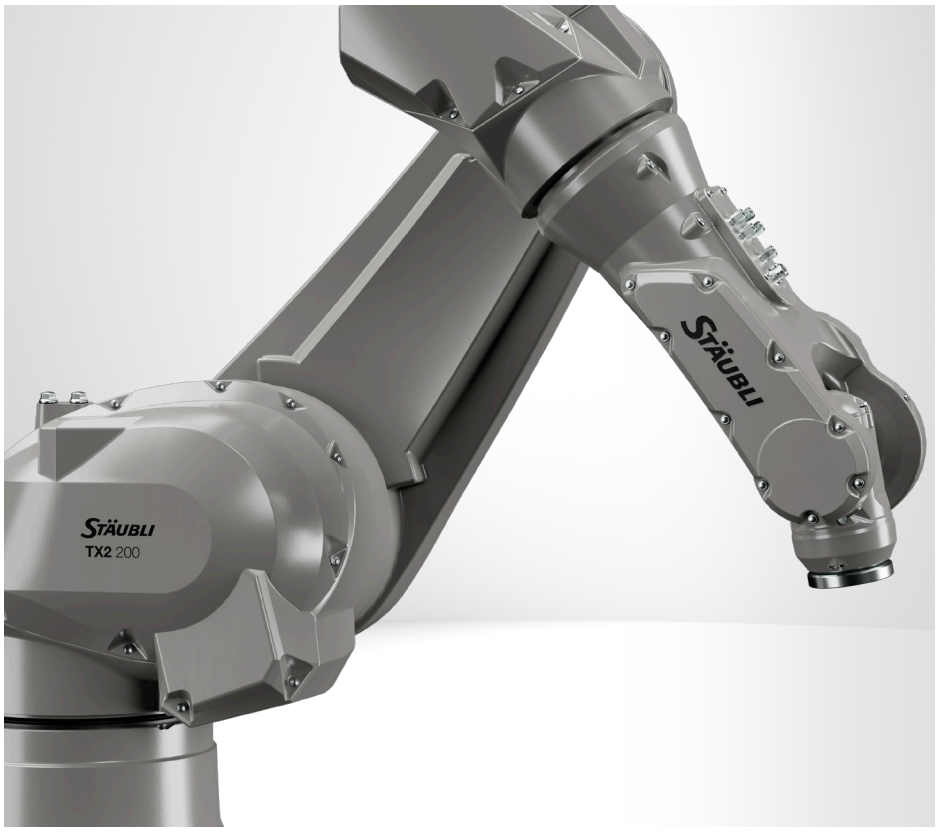
FAST MOVING TECHNOLOGY

STÄUBLI

Automation Solutions in the food industry

Robotics | Experts in Man and Machine



Editorial

The food manufacturing industry encompasses a wide range of sectors that fulfill the various steps, such as cleaning, processing, packaging, and distribution, required to turn raw agricultural materials into food and beverage products. For more than 20 years, we have collaborated closely with key players and partners, drawing on industry-leading expertise to develop products that support your success.

Our humid environment (HE) range of robots, with pioneering EHEDG-compliant hygienic design, can transform your production and allow you to realize the benefits of automation in extreme environments. Specialized food-grade NSF H1 oil optimizes their efficiency, giving you a lower total cost of ownership while increasing productivity and dramatically lowering the risk of contamination.

Our four- and six-axis food robots, as well as AGVs, offer a wide variety of solutions. The following pages provide details as well as insights on automation. You'll also find stories about companies that have transformed their production with our robots. We hope you'll be inspired by these innovations.

Find out more on our website:
www.staubli.com

Content

Protein processing

Stäubli robots for the protein processing industry make it possible to process meat with maximum output in particularly sensitive production environments.

Dairy products

Dairy, especially very sensitive products such as hard cheese, soft cheese and fresh cheese, benefit from the encapsulated HE robots. Washdown processes are managed with ease.

Convenience food

Stäubli robotic arms offer solutions for handling boxes, loading trays and customizing products. Learn more about these solutions for the ready-made meals industry.

Bread and baked goods

Stäubli robots are ideally suited for grain processing while reducing Musculoskeletal disorders (MSDs) in handling, scoring, and pick-and-place operations.

Others

Hygienic Stäubli robots take over dynamic and precise processes in a wide variety of applications in the food industry – from beverage bottling to pet food production.

Services

At every phase of integrating a robotic cell, from project inception to the entire equipment lifecycle, Stäubli's teams can help you, wherever you are.

AT A GLANCE

Standard & HE series

A full range of robots for food plants from secondary to primary production

SECONDARY

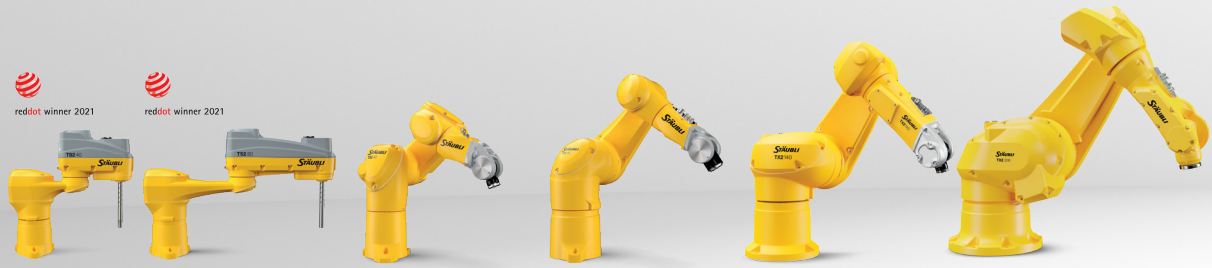
Standard series for:

Dry product processing where no wash-down is required, but suitable for mild wipe-down cleaning as in dry-baked goods processes, secondary packaging and palletizing.

6 axis: ISO 5
SCARA: ISO 6

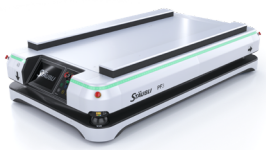
IP65 / wrist IP67

Food Oil optional



MODEL	TS2-40 / 60	TS2-80 / 100	TX2-40 / 60 / 60L	TX2-90 / 90L / 90XL	TX2-140	TX2-160/ 160L	TX2-200 / 200L
Max. load capacity	8.4 kg	8.4 kg	2 kg / 4.5 kg / 3.7 kg	14 kg / 12 kg / 7 kg	40 kg	40 kg / 25 kg	170 kg / 110 kg
Reach (between axis 1 and 6)	460 mm / 620 mm	800 mm / 1000 mm	515 mm / 670 mm / 920 mm	1000 mm / 1200 mm / 1450 mm	1510 mm	1710 mm / 2010 mm	2209 mm / 2609 mm
Mounting	Floor / Ceiling	Floor / Ceiling	360° mounting possibility			Floor / Ceiling	Floor / Ceiling**

Stäubli mobile robotics line-up serving your factory floor



Platform

Forklift

ERP Connection

Fleet Control Software

Navigation

Software

Stäubli designs and manufactures premium automated guided vehicle (AGV) solutions.

This unique portfolio of compact AGV platforms delivers outstanding performance such as omnidirectional motion, high positioning precision of 5 mm, and ability to transport the highest payloads from 1.5 tons up to 450 tons. Synchronized by our software, the Stäubli smart AGV fleet performs in the most efficient way, providing you with insights for data-driven decision making.

PRIMARY + WASHDOWN

HE series for:

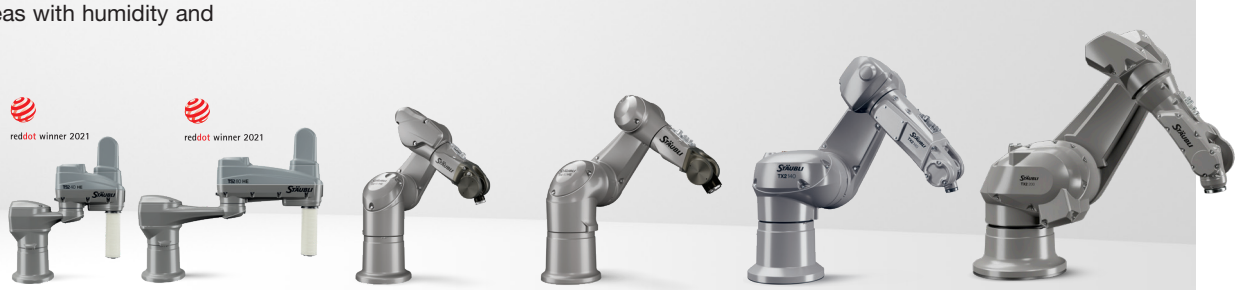
Wet environments where harsh chemicals are used and direct contact with sensitive food products is likely or desired; protein and dairy processing, baking applications with fresh ingredients (milk, egg, etc.), also favored in “mixed” areas with humidity and condensation.

6 axis: ISO 5
SCARA: ISO 6

IP67*

Food Oil

pH value: 2-12



HE MODEL	TS2-40 / 60	TS2-80 / 100	TX2-60 / 60L	TX2-90 / 90L / 90XL	TX2-140	TX2-160 / 160L	TX2-200 / 200L
Max. load capacity	8.4 kg	8.4 kg	4.5 kg / 3.7 kg	14 kg / 12 kg / 7 kg	40 kg	40 kg / 25 kg	170 kg / 110 kg
Reach (between axis 1 and 6)	460 mm / 620 mm	800 mm / 1000 mm	670 mm / 920 mm	1000 mm / 1200 mm / 1450 mm	1510 mm	1710 mm / 2010 mm	2209 mm / 2609 mm
Mounting	Floor / Ceiling	Floor / Ceiling	360° mounting possibility			Floor / Ceiling	Floor / Ceiling**

* requires pressurization kit / IP65 for TS2 bellows

**consult us

THE HE INDUSTRIAL ROBOT SERIES

Key factors for the use of robots in the food industry

Five prerequisites for robots to meet your needs

1. Hygienic design
To avoid contamination with bacteria, especially in the case of direct contact with unwrapped food.

2. Specialized food-grade oil
To limit the risk of contamination from lubricant leakage, oil used must be food grade.

3. Pressurization
To prevent the ingress of microorganisms, the robot arm will be pressurized.

4. Washdown compatibility
To ensure high food quality, daily intensive cleaning of all system components is a vital factor.

5. Full robot portfolio
In food production, there is not just a single process, but a complex workflow from the first step through secondary packaging.

More info on our HE series

Stäubli's answer to these key factors

A complete range of hygienic food robots: the HE robot portfolio complies with the requirements of the Food Safety Management Systems (i.e. HACCP) and GF SI recommendation article J1 & J2.

The HE robot range is designed to be compliant with EHEDG guidelines as well as the Machinery Directive (Directive 2006/42/EC) and DIN ISO 14159.

- ✓ IP65/67 fully encapsulated design
- ✓ Liquids drain down to the ground
- ✓ Smooth surface (<0.8 µm)
- ✓ Special coating and surface treatment
- ✓ Pressurization (50 mbar)
- ✓ TX2 HE robot with SIL 3/PL e and UL compliant
- ✓ All connections inside the robot arm

- ✓ Washdown compatibility: chemical resistance to detergents and disinfectants (up to pH 2 - 12)
- ✓ Use of food-grade NSF H1 oil with no loss of performance
- ✓ Heavily stressed parts made from stainless steel
- ✓ Ready access to important components, enabling fast replacement
- ✓ Complete portfolio of SCARA and six-axis robots with HE specification

PROTEIN PROCESSING

Automated protein handling

The protein industry faces global challenges today more than ever before. Our robotic solutions offer the right answer to protein processors, leveraging productivity, traceability, safety, and reliability.

Deboning, cutting, packaging

1 An automated guided vehicle (AGV) counterbalanced stacker from Stäubli brings pallets from cold storage to the line for further processing.

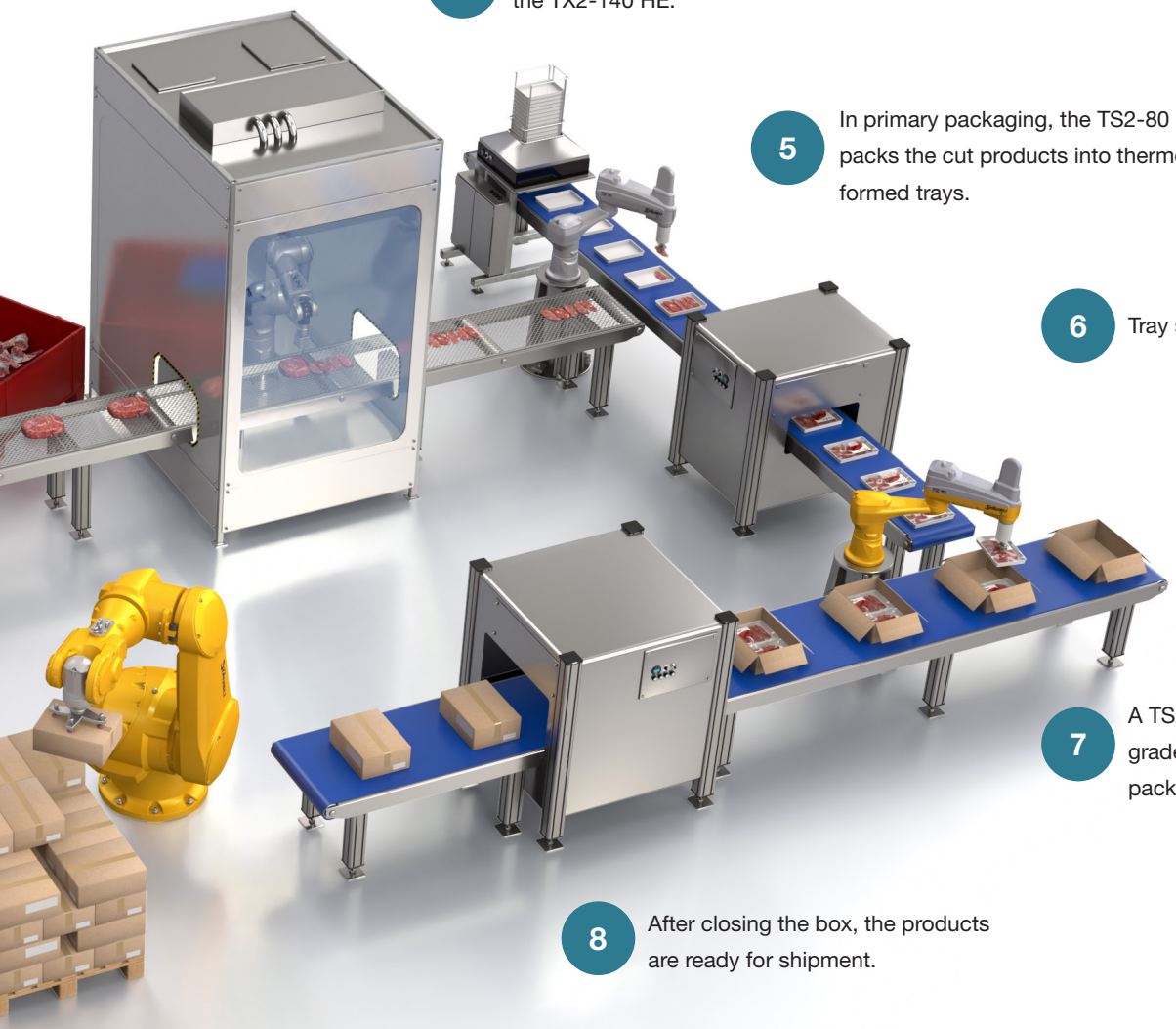
2 At the start, a TX2-160 HE takes the products from the pallet boxes and loads the deboning line.

3 A 3D vision system determines the bone position and the TX2-160 HE precisely detaches the meat from the bone.

10 The automated Stäubli AGV forklift drives the pallets to further processes.

Find out more: Meat brochure

Stäubli automates your applications in poultry, pork, beef, and alternative proteins with our robots and partners. We offer proven and tested technologies to resolve your issues met by protein processing plants from front to back, wet and hot zones to packaging lines, without the need for robot covers. From deboning to thermoform loading, grading to labeling, or sausage handling, we work with you to meet and exceed expectations.



4 Waterjet portioning handled by the TX2-140 HE.

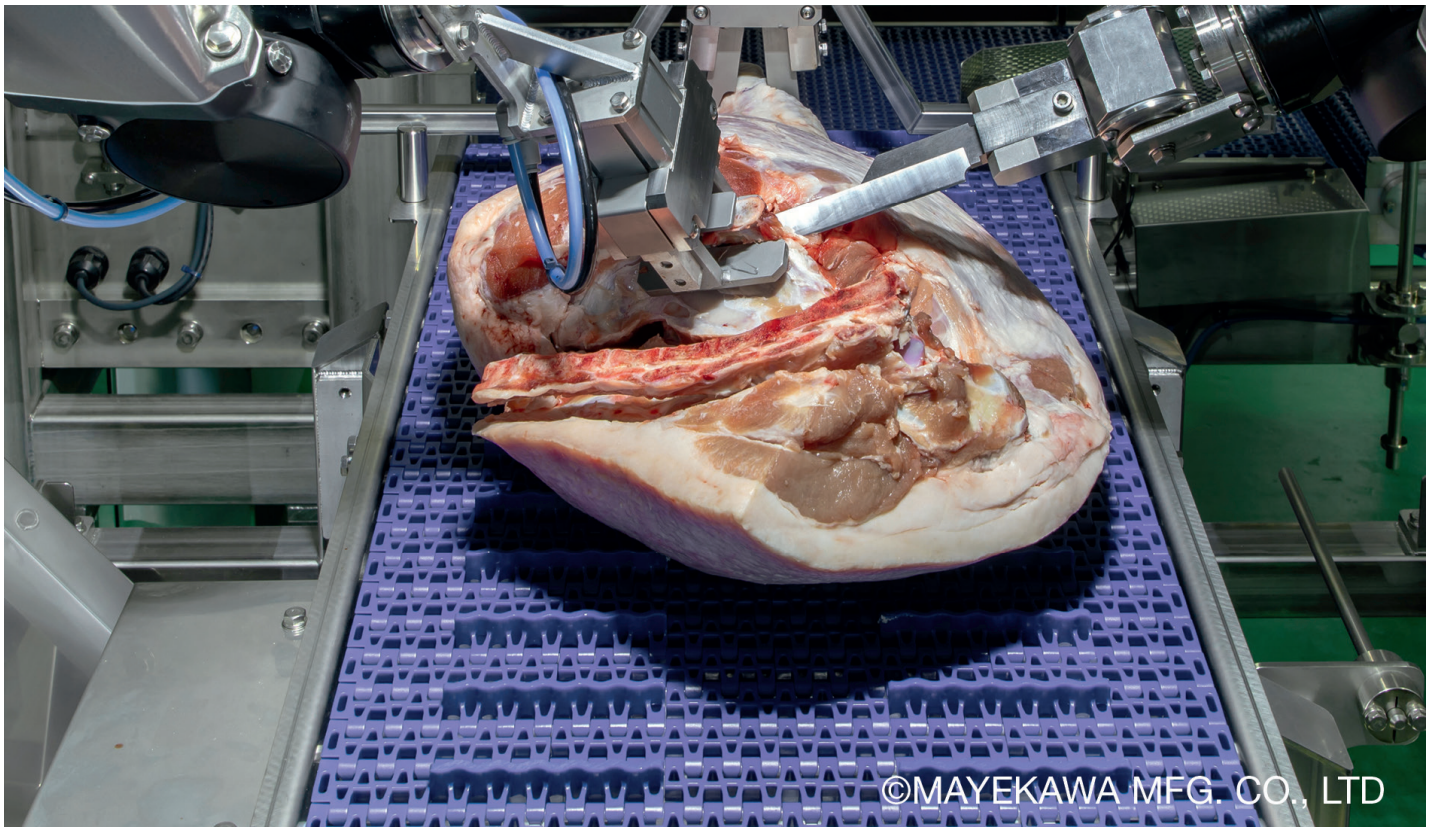
5 In primary packaging, the TS2-80 HE packs the cut products into thermoformed trays.

6 Tray sealing station.

7 A TS2-80 with NSF H1 food-grade oil takes over secondary packaging.

8 After closing the box, the products are ready for shipment.

9 Finally, a TX2-200 stacks the filled and sealed boxes onto pallets.



NEW WAYS OF PROCESSING MEAT

Deboning pork – with robots and artificial intelligence

At the heart of the CELLDAS robotic cell from Mayekawa, a Japanese industrial machinery company, are three Stäubli six-axis robots (TX2-60 HE and TX2-90 HE). This new, fully automated system takes around 40 seconds to debone the hipbone and coccyx from the pork leg. The main work is done by a "robot trio" from Stäubli. While two of the robots are responsible for handling and positioning the pork pieces, the third six-axis robot, equipped with a knife, takes over the deboning. There is an intelligent division of labor here: The two robots with grippers can, for example, fix a ham or shoulder piece in such a way that cutting is easier for the third robot.

How does the robot know where to make the cuts and where the bones are?
This is achieved through a combination of image processing and artificial intelligence. On the conveyor line leading to the robot cell, the piece of meat to be boned is scanned with a 3D scanner and X-rayed. The function of the human eye is therefore replaced by image processing and AI.

Customer benefits

- Revolutionary meat processing with maximum output
- Use of HE robots for reliable processing
- Avoidance of physically exhausting manual labor
- Optimal cutting paths achieved by Artificial Intelligence combined with image processing

Deboning the hipbone and tailbone of a pork leg in about 40 seconds

High productivity thanks to the speed and precision of Stäubli TX2 HE robots

Outstanding hygienic qualities and washdown capabilities

ROBOT AUTOMATES SAUSAGE PRODUCTION

Robot slicer is a world first

Grocery chain Kaufland is breaking new ground in the handling of 12-kg sausages. A Stäubli TX200 HE six-axis robot takes on the job of loading a machine for the automated slicing of 1.5-meter-long sausages into appetizing cold cuts ready for packaging. The robot solution, which is a world first, relieves employees of repetitive and heavy work while bringing other considerable advantages.

Customer benefits

- Safe compliance with the strictest hygiene standards
- Relieves staff from strenuous work
- Consistently high output
- Washdown-capable robots for easy cleaning
- Maximum flexibility
- Low space requirement

"The Stäubli TX200 HE six-axis robot has completely dispelled my concerns regarding compliance with our strict hygiene standards. The robotic solution also fulfills our other objectives one hundred percent."

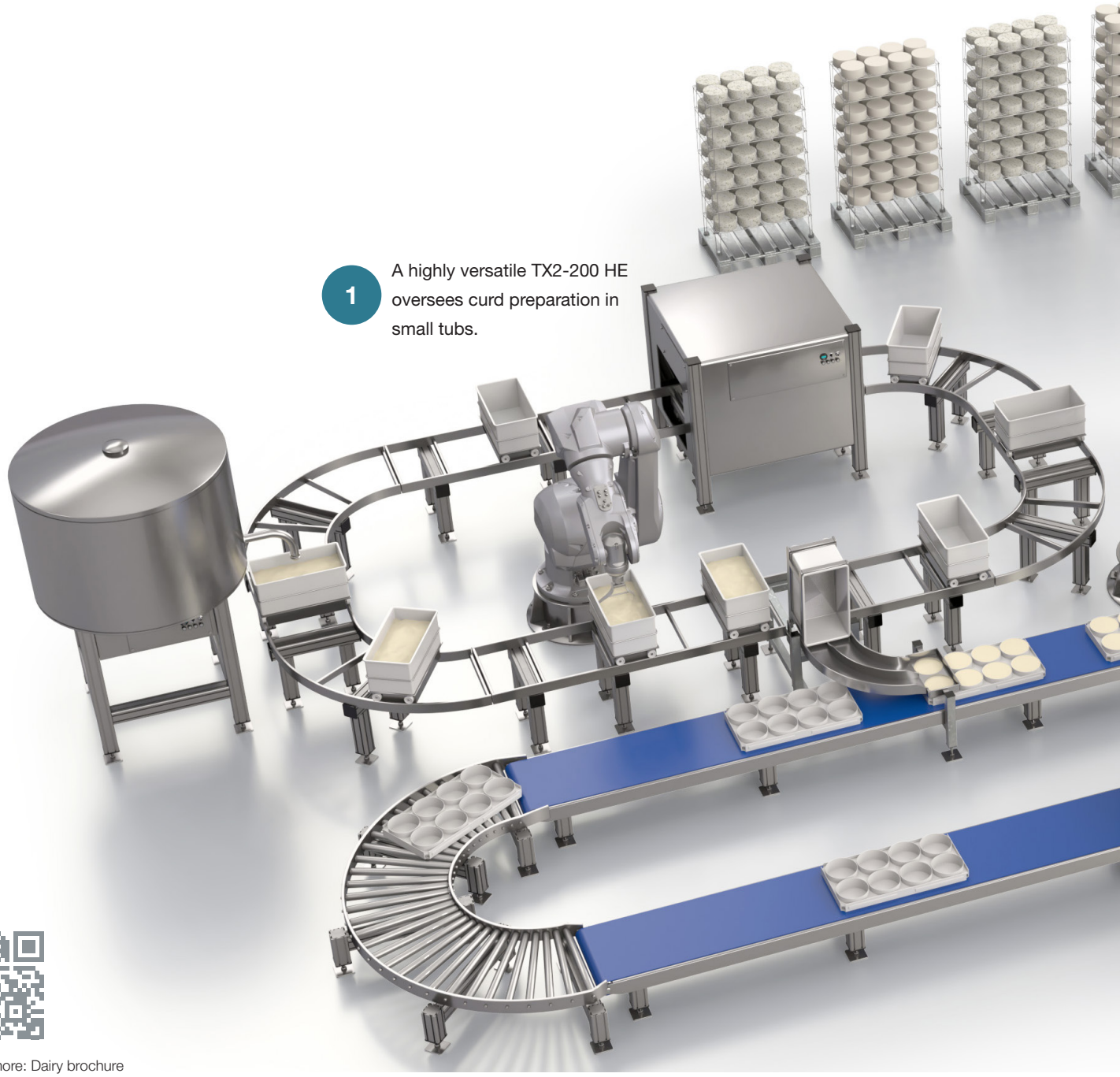
Dieter Schäfer
Packaging team leader at Kaufland Fleischwaren

Read more

DAIRY PRODUCTS

Robot-assisted production of dairy products

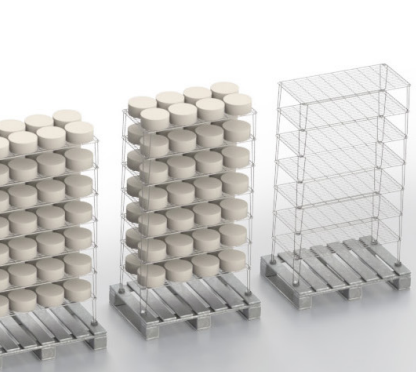
In the manufacturing of soft cheese products, more and more standard processes are being automated with Stäubli HE robots. The reasons for this are clear: greater flexibility, increased output, and maximum reliability. The process steps are similar to those in fresh cheese production. The robots start with the preliminary processes of curd preparation, take on handling operations along the line, and manage the storage of the products in racks for further processing as well as loading the mold-washing machines – with all of this being done safely, precisely and hygienically.

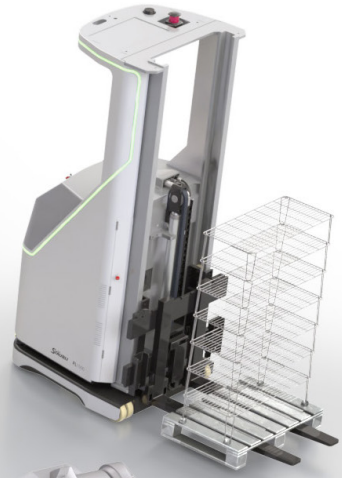


1 A highly versatile TX2-200 HE oversees curd preparation in small tubs.

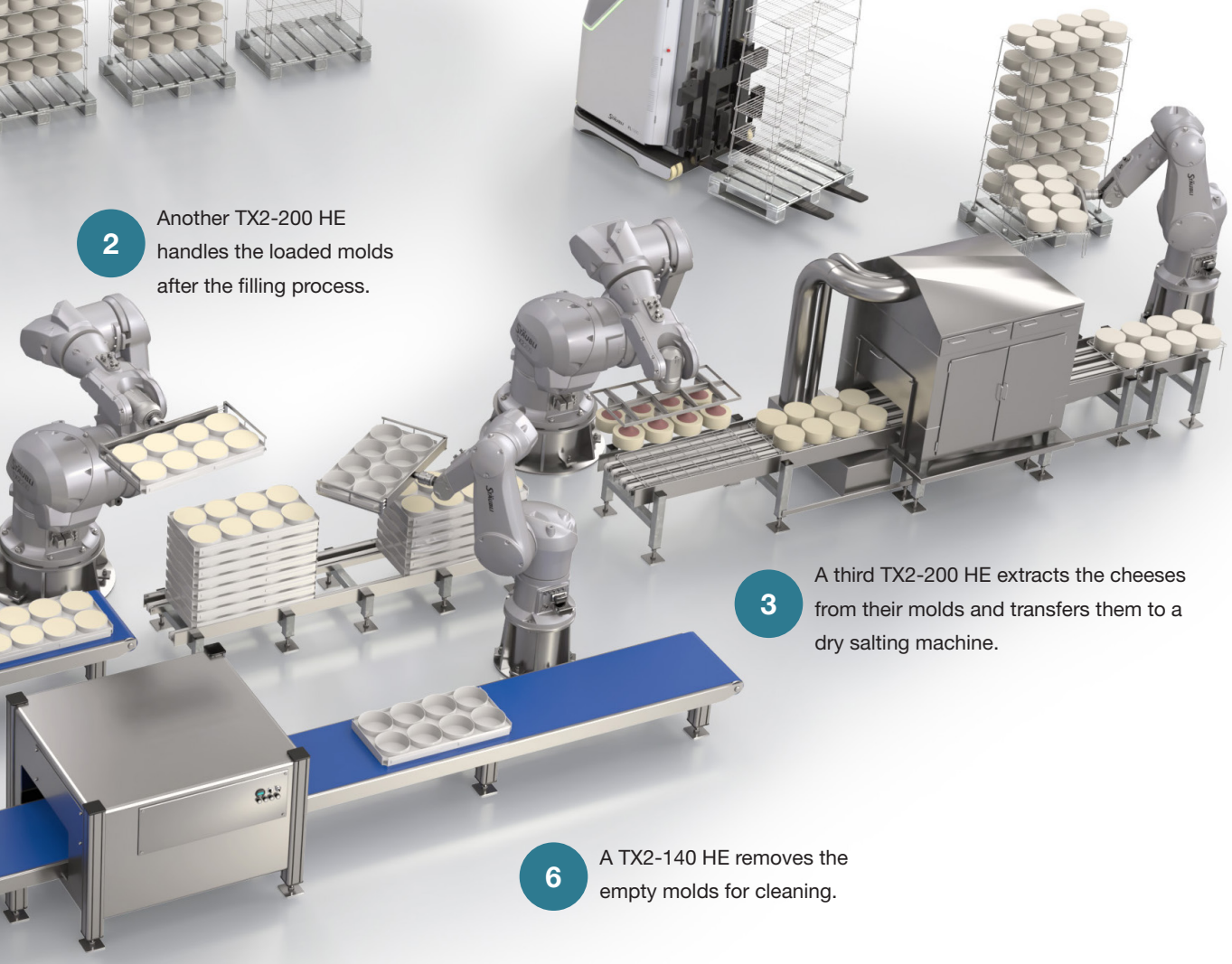
Find out more: Dairy brochure

5 A Stäubli counterbalanced stacker subsequently takes the racks away.





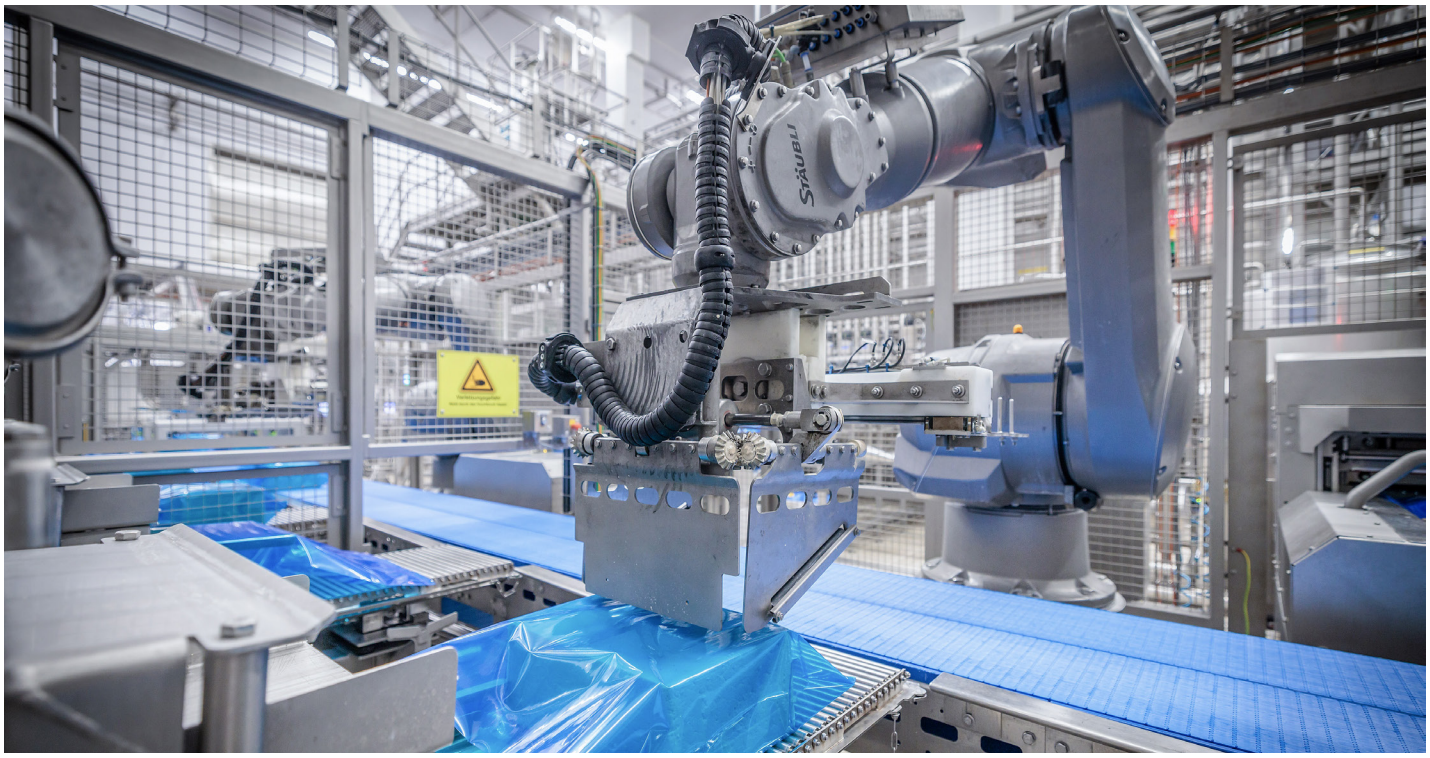
4 After salting, a TX2-160 HE loads the products into prepared racks.



2 Another TX2-200 HE handles the loaded molds after the filling process.

3 A third TX2-200 HE extracts the cheeses from their molds and transfers them to a dry salting machine.

6 A TX2-140 HE removes the empty molds for cleaning.



AUTOMATED HARD CHEESE PRODUCTION

Primary packaging of 100 tons of block cheese daily

In two identical cells, the cheese blocks from three finishers each are packed into film tubes. The hygienic Stäubli robots pack up to 5.5 tons of cheese per hour.

Bayerische Molkereiindustrie (BMI) produces around 35,000 tons of hard cheese a year at its Jessen site in Germany. To accomplish this, two robotic cells handle primary packaging of the freshly produced cheese blocks under the strictest hygiene standards. This makes this production site not only the largest cheese factory in the BMI group, but also a major producer throughout Germany, especially since its product diversity is broad and its production is highly flexible.

Between 2017 to 2019, the company invested the impressive sum of more than €100 million, including investment in a new hard cheese factory to produce these volumes and varieties economically with consistently high quality.

BMI commissioned Lemmermeyer Edelstahl-Anlagenbau in Deiningen, Germany to design the primary packaging line. Three of six TetraPak columns are assigned to a robotic cell with a Stäubli six-axis TX200L HE robot. With a load capacity of 100 kg and reach of 2.6 meters, the robots are optimally prepared to handle the cheese blocks, and thanks to the gripper developed by Lemmermeyer, also have multitasking capability.

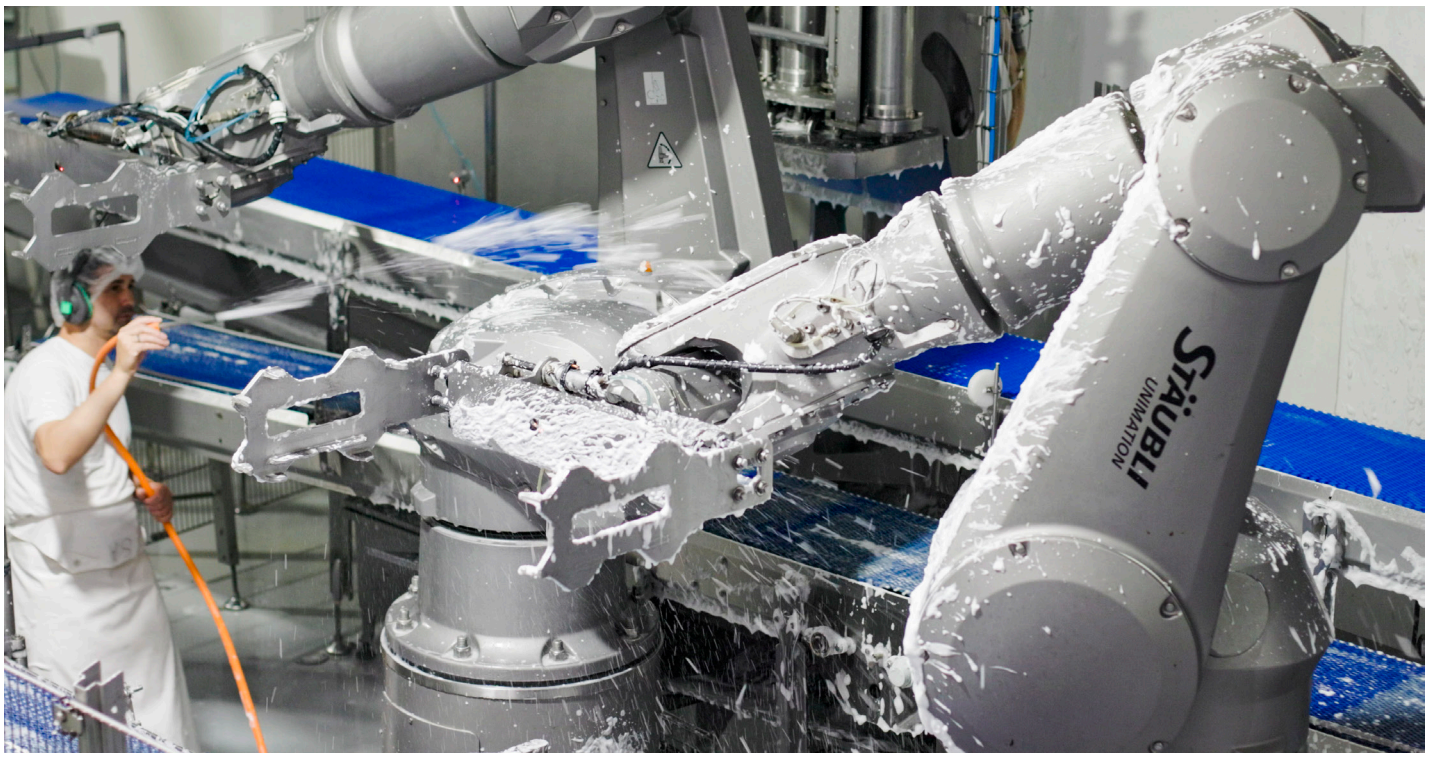
The entire plant runs 20/7. As Thomas Benicke, production manager at the hard cheese factory explains, “We produce for 20 hours. Then the entire plant stops, gets cleaned, and a new production cycle begins.”

Packing capacity of up to 5.5 tons per hour

High throughput and extreme flexibility using two identical cells

Processing 350 million liters of milk from 35,000 cows per year

Read more



AUTOMATION OF CORE PRODUCTION PROCESSES

A second robot line for Argentinian cheese manufacturer

NOAL SA, a major Argentine cheese manufacturer, recently automated its second production line with Stäubli robots. As in its first line, the robots are not used for packaging and palletizing, as is now common in dairies, but in the middle of the hygienic area in the fermentation process. The new production line is a system for managing the filling of molds with soft white cheese curds. In total, the three new TX200 HE robots move six tons of cheese per hour and are cleaned daily by washdown in compliance with HACCP.

Customer benefits

- Safe compliance with the strictest hygiene standards
- High productivity
- Consistent quality
- Easy cleaning thanks to washdown-capable robots
- Avoidance of human intervention

"To achieve safe production from a hygienic point of view, the choice of Stäubli for us was very clear. It was the only company that offered us technology that fits into a food manufacturing process."

Agustin Pfaffen
Sales manager of system integrator E.T.I., responsible for creating NOAL's automated line

Read more

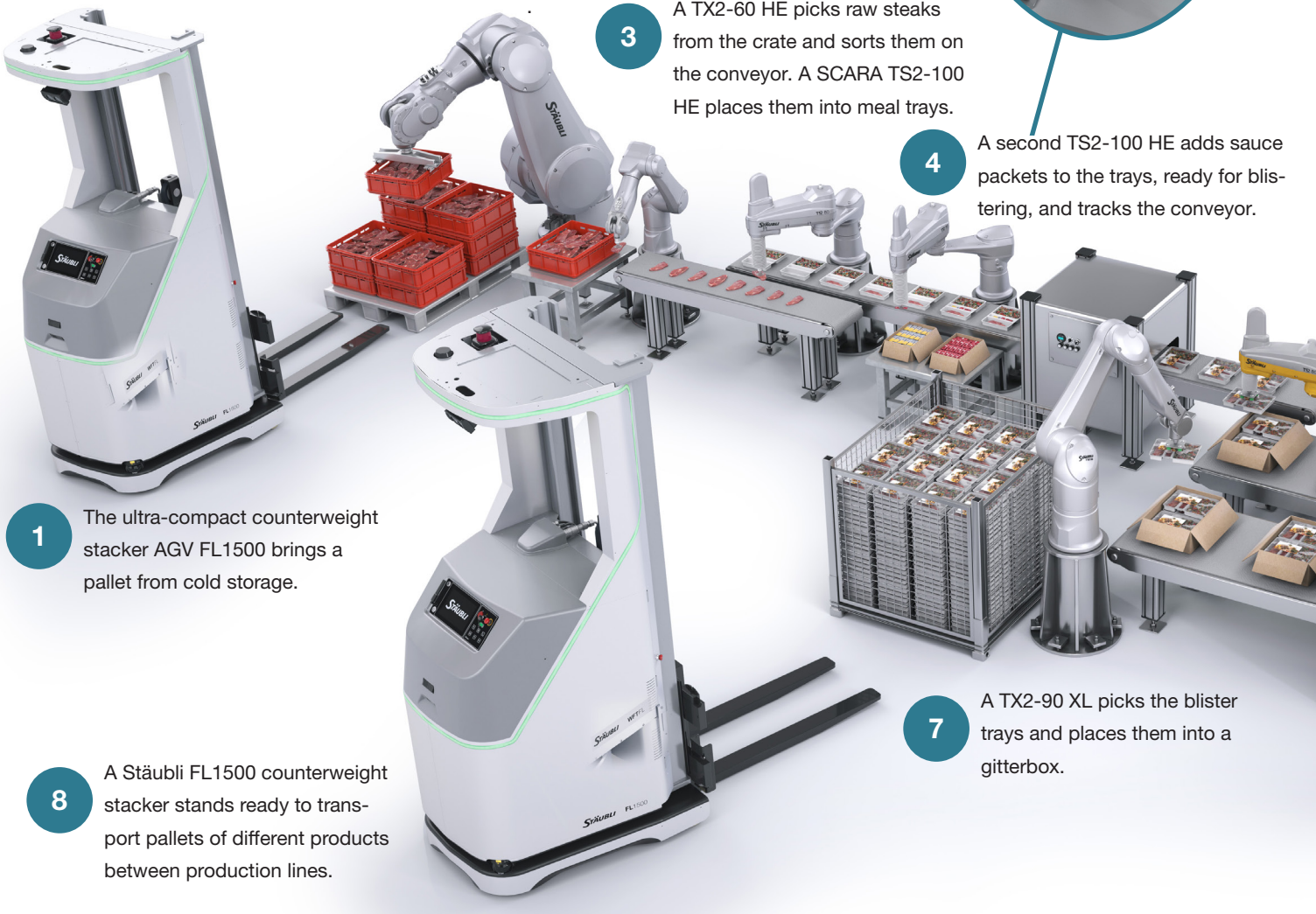
CONVENIENCE FOOD

Robots that respond to the latest consumer trends

Stäubli has a mission to make robot integration as easy and satisfying as a ready-to-eat gourmet dish. Our unique offering of food-grade robots is present in Ready-to-eat (RTE) and snack food facilities throughout the world completing a huge variety of tasks.

With products varying from microwavable dishes to candy bars and salty chips, the potential for robotic applications in convenience food production is vast. Our fast and nimble robots offer the flexibility often needed to run multiple SKUs on single lines while rising to the challenge in terms of productivity. Robotic applications in convenience food range from snack trays to sandwich assembly, pizza demolding, tray loading and more.

Packaging convenience food



1 The ultra-compact counterweight stacker AGV FL1500 brings a pallet from cold storage.

2 A TX2-200 HE picks crates from the pallet and transfers them to the bin-picking station.

3 A TX2-60 HE picks raw steaks from the crate and sorts them on the conveyor. A SCARA TS2-100 HE places them into meal trays.

4 A second TS2-100 HE adds sauce packets to the trays, ready for blistering, and tracks the conveyor.

7 A TX2-90 XL picks the blister trays and places them into a gitterbox.

8 A Stäubli FL1500 counterweight stacker stands ready to transport pallets of different products between production lines.

ROBOTIC SANDWICH ASSEMBLY LINE

Automated sandwich production

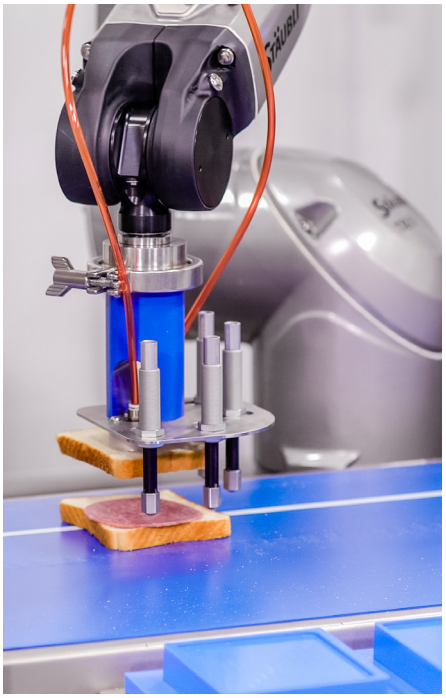
A conveyor belt delivers the sandwiches to a Stäubli TX2-60 HE robot as two halves – the bottom slice, already buttered and filled, and the top slice, which is only buttered. The robot picks up the top slice and places it over the filling on the bottom slice. The sandwich is now whole.

Next, the robot rotates the sandwich 45 degrees and positions it diagonally on the conveyor belt. It then proceeds to the last station, where it is cut into halves or quarters. In this way, up to 60 sandwiches per minute can be produced per line.

Customer benefits

- Fully automated production of different sandwich variants
- Reliable, hygiene-compliant design
- Maximum flexibility

Read more



5 A TS2 4-axis robot picks the blister trays and places them into boxes.

6 A TX2-200 stacks ready-to-ship boxes onto an EU pallet.

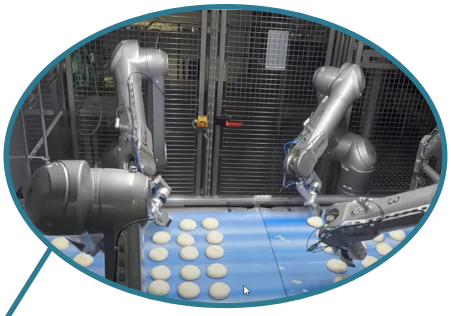
BREAD AND BAKED GOODS

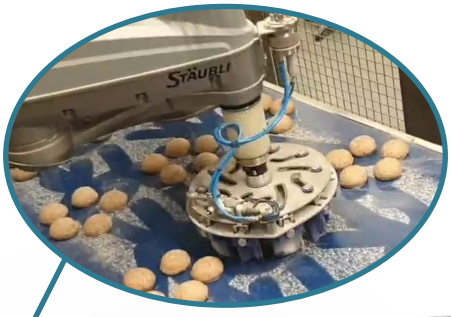
Grain processing in the robotics era

Stäubli brings you the largest selection of robots in the industry for dry, dusty, and washdown processes, covering everything from bread making to cake cutting.

The needs of the bakery industry are many and vary broadly in terms of products, environments, and applications. With our adaptable range of robots, we can support you through your automation journey all the way from the mixing room to the final packaging of your baked goods. We can tackle applications as common as palletizing or deftly perform cake depositing or high-speed bread scoring with extensive trajectory variations to retain a crafted final appearance – all while being suited for dusty, wet, or freezing environments.

Applications from primary processing to packaging





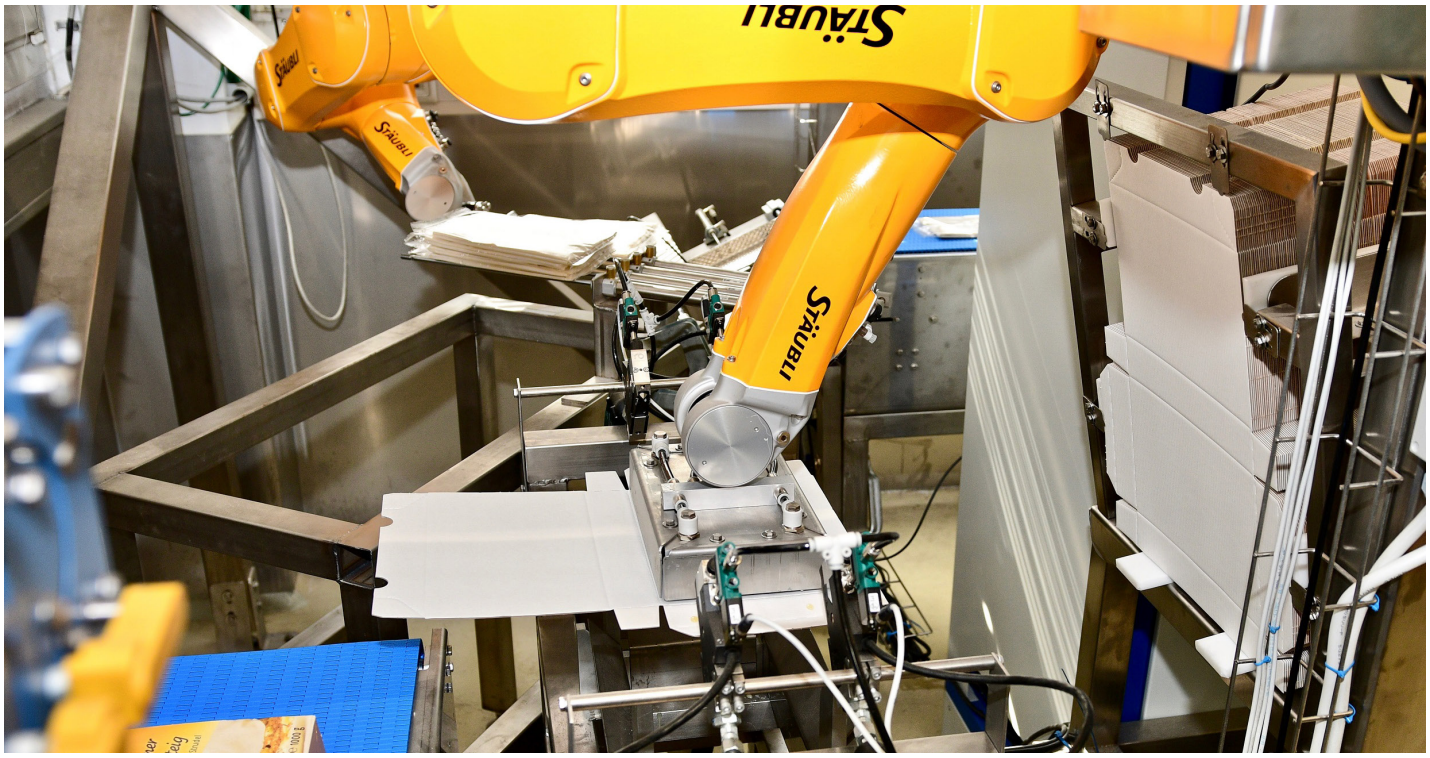
3 Two ceiling-mounted SCARA TS2-60 HE robots sort the dough pieces.

4 A TS2-80 HE (ceiling-mounted) joins the dough pieces together to form a ring.

5 A TS2-100 HE (ceiling-mounted) handles the delicate baked goods.

6 The standard version of the Stäubli TX2-60L flexibly fills the cartons with baked goods.

7 The TX2-200 handles palletizing tasks.



The two robots, Sissi and Franz, work in perfect harmony around the clock during peak apple strudel season.

FULLY AUTOMATED PACKAGING OF STRUDEL DOUGH

Robot safety features enable implementation without safety fencing

At Weinbergmaier GmbH in Vienna, “Sissi” and “Franz,” as their human operators have quaintly named the two Stäubli robots, pack high-quality strudel dough in perfect synchronization within a cycle time of 1.5 seconds. Among the distinguishing features of the company’s fully automated and hygienic packaging line are the pair of ceiling-mounted robots – and the absence of a protective barrier.

Sissi and Franz work tirelessly in unison

While Franz prepares the box for Sissi, it is her job to carefully insert the four packs of dough she is holding into the box. The TX2-60 has to be highly dynamic, but at the same time handle the product with care. Sissi has mastered the art with such perfection that any risk of damage to the delicate confection is eliminated. Finally, a tamper evident seal is applied, and an inkjet print head marks the box with a batch number and production date. The filled and sealed carton then proceeds on a conveyor belt to the palletizing station.

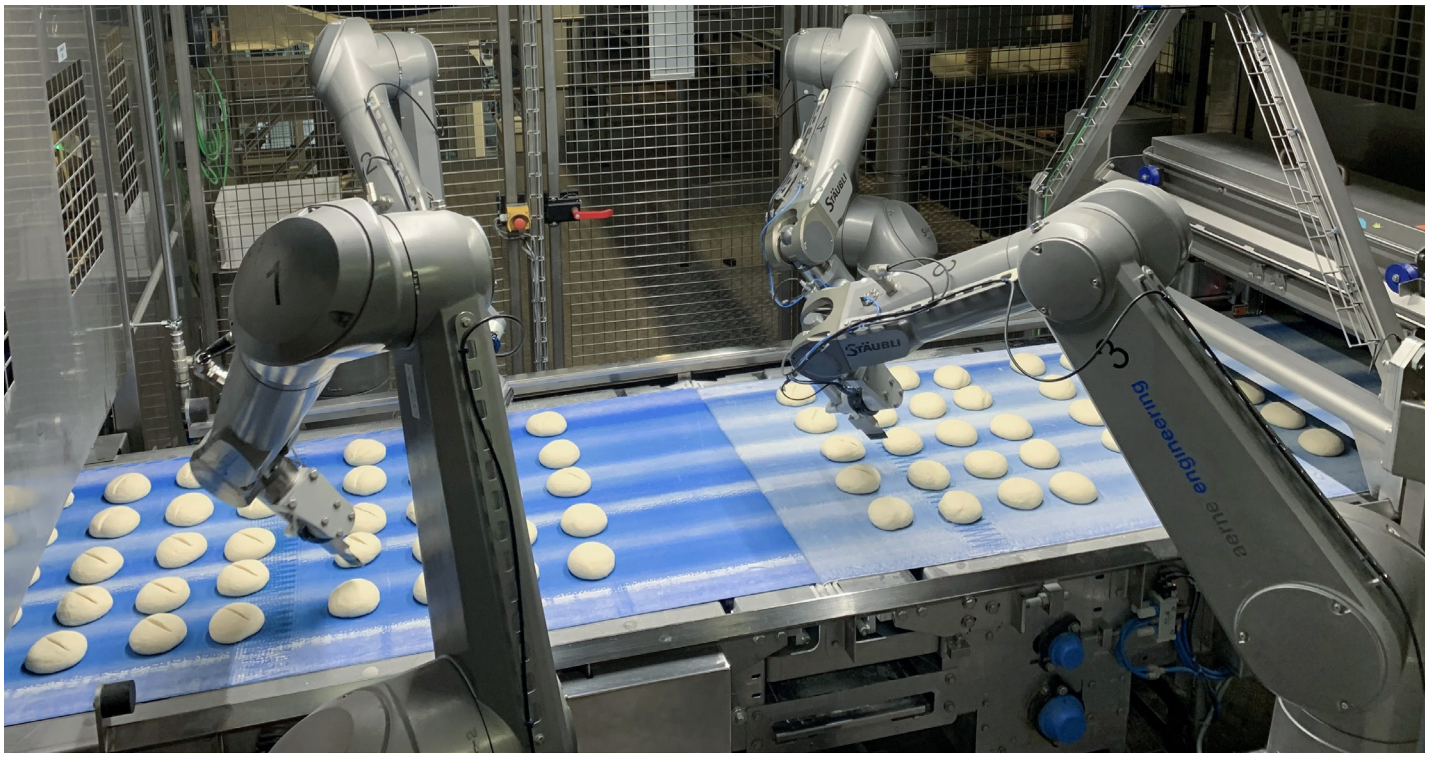
The Stäubli TX2 robot series, coupled with our innovative CS9 controller, made a decisive contribution to the realization of this enclosure-free robot cell. The robots comply with the strict requirements of SIL 3/PL e safety standards, and to ensure maximum safety, their every movement is monitored by sensors.

Short cycle times (around 1.5 seconds) achieved with highly dynamic robots

No safety fencing thanks to Stäubli integrated safety features

Ultra-compact design of the packaging line

Read more



AUTOMATIC BREAD SCORING

Stäubli robots meet the challenge of perfect crusty bread

Coop is one of Switzerland's leading food distribution chains. The company's dedicated bakery in Schafisheim is the largest in the country, producing quiches, bread, pastries, pies, and cakes. With thousands of loaves of bread leaving its ovens every day, the industrial bakery asked Aerne Engineering AG to automate the scoring of bread before baking. The system integrator, who works frequently with Stäubli, designed a process that incorporates four six-axis TX90 robots. Bread is now scored quickly and precisely, relieving operators of taxing work and increasing their flexibility in managing production.

Customer benefits

- Relieves operators of taxing work
- Modular and expandable system
- Performs up to 17,000 cuts per hour
- Reduces waste from improper scoring
- Ensures fully hygienic production

"Our employees had been performing this task manually, but ergonomically speaking, it's an arduous exercise. We wanted to improve their working conditions."

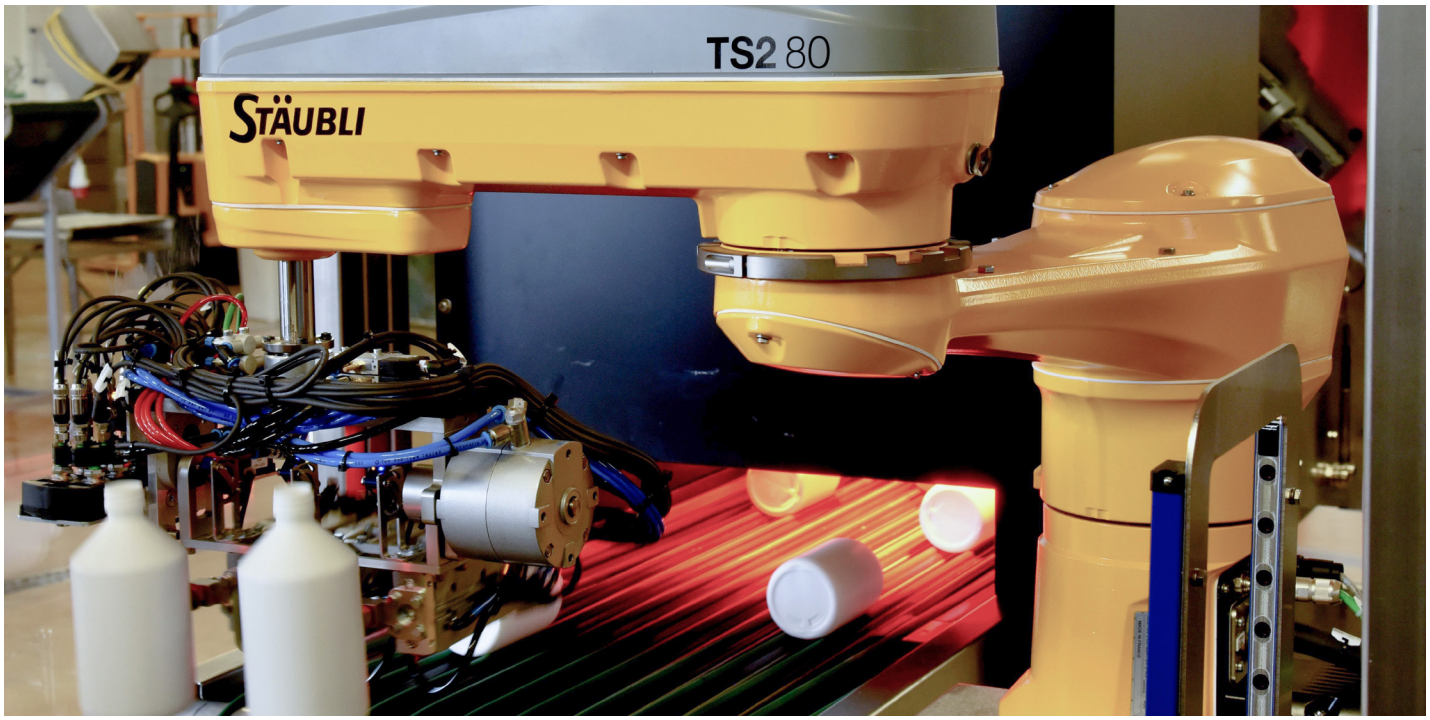
Simon Huwiler
Coop project manager

Read more

OTHERS

Robots for various other areas of application in the food sector

Outside of the more typical segments of the food industry using robots, industries like fresh produce, protein powders and other dietary supplement producers are also turning to robots to take their processes further. Applications like fruit and vegetable sorting, container filling, or even robotic harvesting in modern farms are all now possible. Stäubli's easy to integrate and versatile robots are ready to answer your call for efficient production.



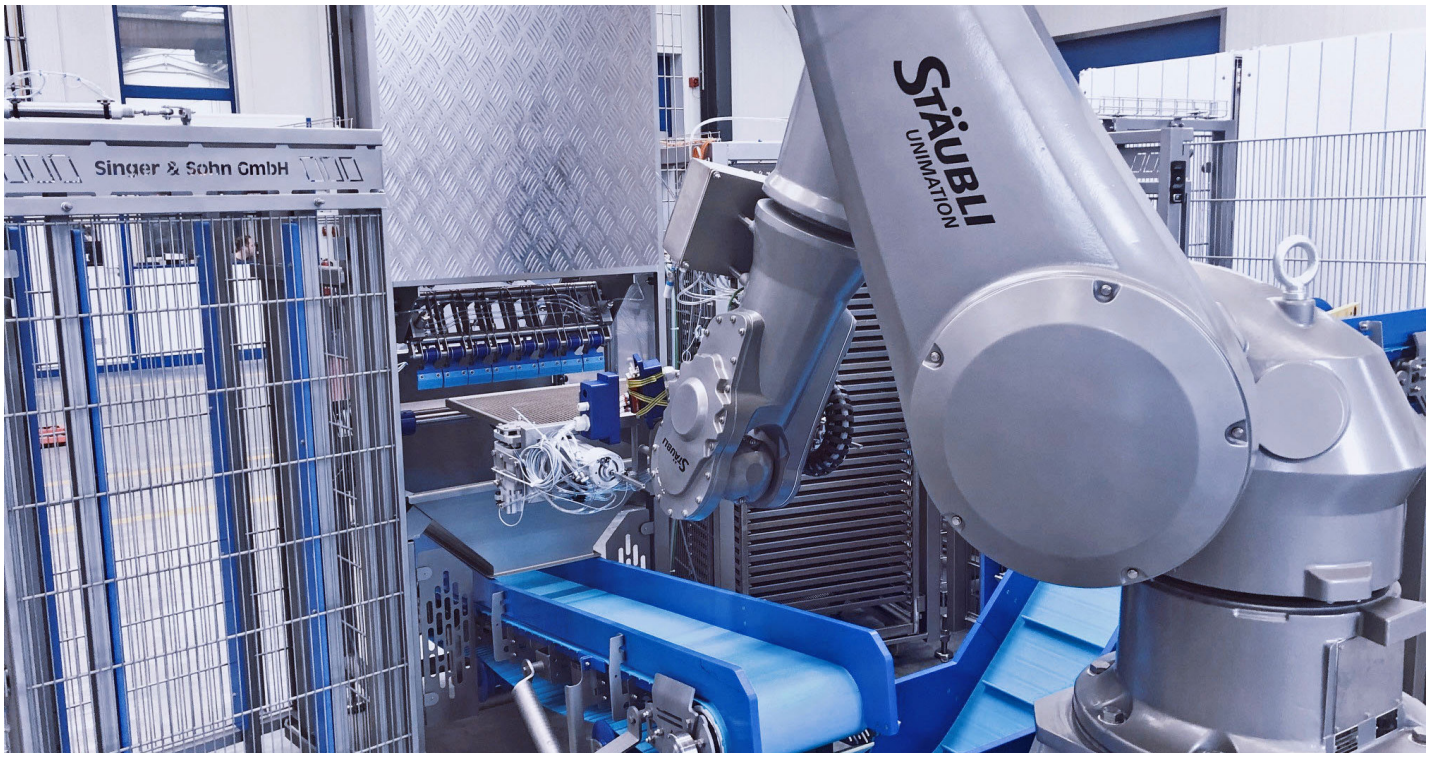
The highly dynamic TS2-80 robot collects the bottles from conveyor 1 and places them onto conveyor 2, all while keeping in perfect sync with its running speed.

FILLING OF LIQUID MOSS AND HERBAL EXTRACTS

How moss gets into a bottle

Tradition meets innovation; nature meets robotics. SonnenMoor, a manufacturer of prime moorland and herbal extracts, combines both to create a solution that ensures the highest levels of flexibility and process safety while significantly increasing output.

The only manual step during production is filling the bunker with empty plastic bottles, which are then spread out onto the production line in the next manufacturing step. This is where the Stäubli TS2-80 SCARA robot comes into play. Its job is to take the bottles from conveyor 1 and place them onto conveyor 2, which is responsible for feeding the bottles into the decanting station. The four-axis robotic arm is synchronized with the speed of the conveyor to prevent the bottles from falling over. In addition, a vacuum gripper with a 3-way pivoting mechanism enables a fifth axis on the robot. This, along with the impressive dynamics of the TS2-80, eliminates the need for a six-axis machine.



The robot presents the trays loaded with dog treats to the scraping station. To its left is one of two docking stations for the trolleys bearing the trays.

INTELLIGENT AUTOMATION IN PET FOOD PRODUCTION

Pet food delivered by robot

A company specializing in food industry automation developed a customized system for a pet food manufacturer. In it, dog treats are automatically swept or scraped off metal drying trays onto a conveyor belt and transported to end packaging.

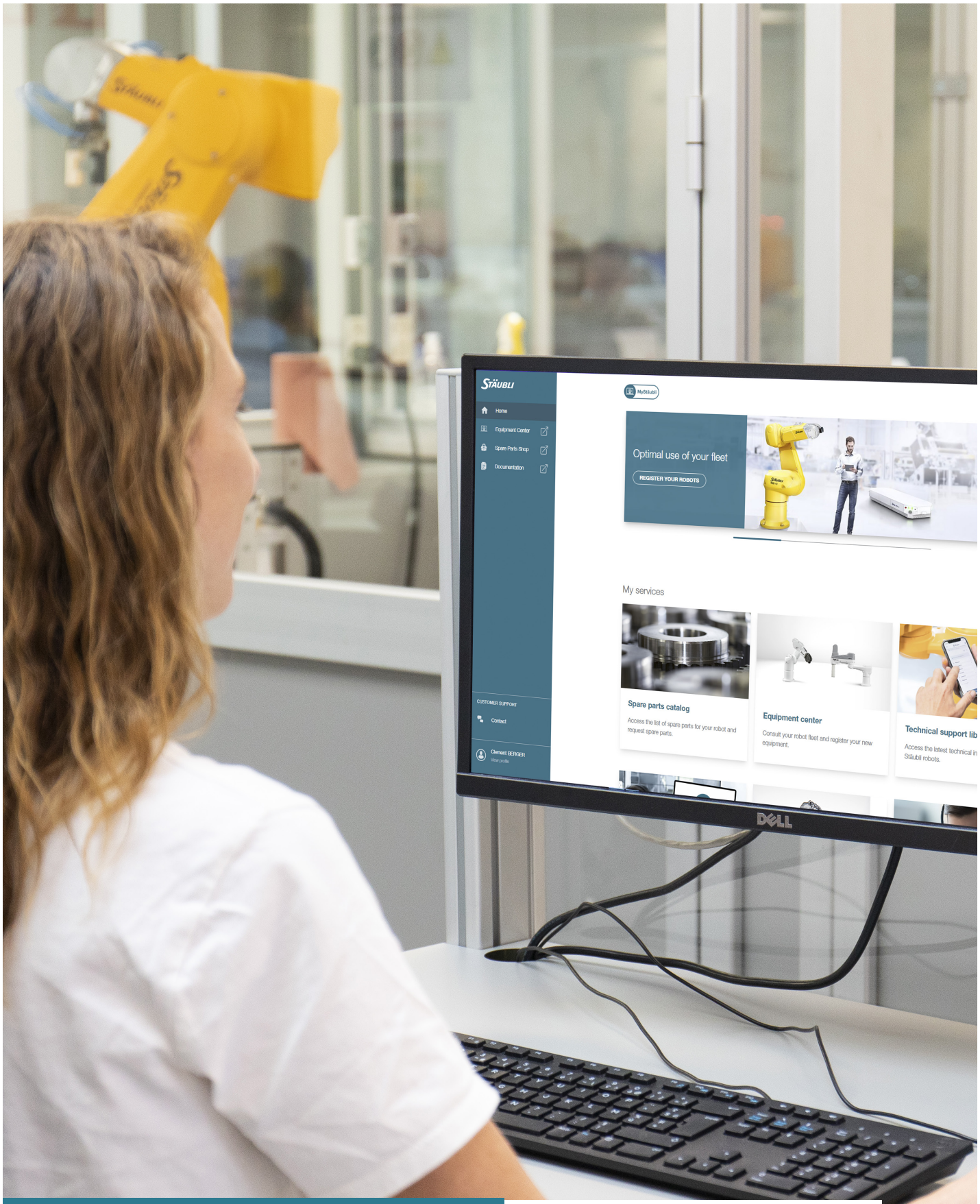
At the heart of the system, developed by Singer & Sohn GmbH, is a powerful Stäubli TX200 HE six-axis robot. Hygiene was a major consideration for the project. As Managing Director Christian Singer explains, “For pet food, the legal hygiene requirements are not quite as stringent as in the production of food for humans. Nevertheless, the production lines are regularly hosed off with water. Consequently, only a splash-proof robot would fit the bill. The customer wanted to keep hygiene standards in the factory very high because its pet food products are exported to many different countries. This narrowed the choice to a Stäubli HE model.” Other selection criteria for the robot were high speed and positioning accuracy, as well as resistance to externally applied force.

The robot cell with the Stäubli TX200 HE in charge of handling the trays has been in constant three-shift operation since June 2020, managing a daily throughput of around 8,000 trays loaded with more than 20 tons of pet food – easily justifying the company’s investment in terms of reproducibility and robustness.

Maximum flexibility for different shapes and flavors

Strict compliance with hygiene requirements

Short cycle times with a performance of six trays per minute



MYSTÄUBLI PORTAL

Make your life easier by putting everything you need to manage your robot in one place!

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BEYOND ROBOTS

A team committed to helping you

For the entire lifecycle of the product our aim is to exceed your expectations by delivering a 5-star service and providing you with tailored solutions.

Service packages
with responsiveness and warranty

200 services engineers
around the world

Maintainability guaranteed
with 15 years spare parts availability

Hotline
with 80% remote resolution rate

Highly trained technicians
to keep your production running

Training courses
tailored to your needs

SERVICE PACKAGES

Packages adapted to your needs

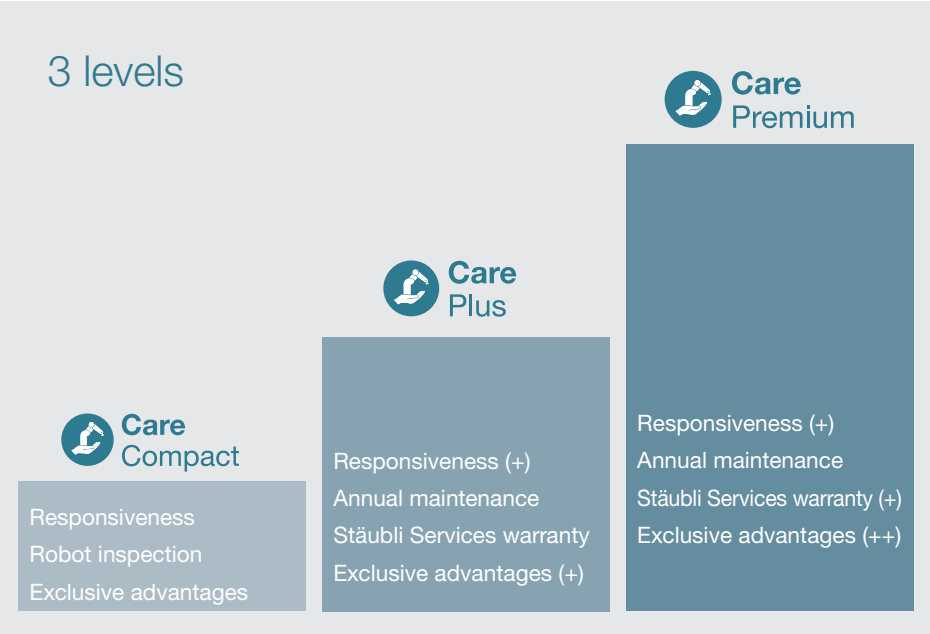
Peace of mind
No administrative and spare parts management for maintenance

Budget control
Plan your expenses and control your budget

Secured performance
We take care of your robots to ensure optimal performance

No cost inflation
Opt for a 3-year contract and benefit from price stability

Flat price for 3 years
Regardless of the maintenance intervention performed



OUR IDENTITY

Stäubli history and DNA

Stäubli is a global industrial and mechatronic solution provider with four divisions: Electrical Connectors, Fluid Connectors, Robotics and Textile. We enable customers to increase their productivity in a wide range of industrial sectors.

Originally founded in 1892 as a small workshop in Horgen (Zurich), today Stäubli is an international group headquartered in Pfäffikon, Switzerland, operating with over 6,000 employees in 28 countries on four continents.

Stäubli focuses on differentiation and growing businesses with strong future potential. Operational excellence as well as strategic investments enable us to grow and take a leading position in defined businesses and markets. Innovation and sustainability are part of Stäubli's DNA: High-quality industrial and innovative mechatronic solutions and proximity to the customer will remain success factors.

Passion and a family spirit make Stäubli unique. Our people make the difference – therefore we continuously invest in the development of our employees. Quality and reliability have been the driving force of Stäubli since 1892. Long-term business activities and independence are key factors in our success.

OUR DIVISIONS

An international group with a passion for innovation

Stäubli Electrical Connectors develops unique technological solutions for every industry. Our electrical connectors, designed for standard or custom applications, meet the highest requirements for efficiency, productivity and quality. We create connections for life.

At Stäubli Fluid Connectors, we cover connection needs for all types of fluids, gases and electrical power. Our standard and specialized products, including quick and dry disconnect couplings, multiconnection solutions, safety breakaway couplings, tool changers, and quick mold change systems combine performance, quality, safety, dependability and durability.

Stäubli Robotics' unique product portfolio contains four- and six-axis industrial robots, cobots, mobile robot systems and AGVs. These powerful, high-precision solutions enable customers in many demanding industries to tackle the challenges of Industry 4.0 under specific manufacturing conditions.

Starting as a technological pioneer and reliable partner in the weaving industry, Stäubli Textile has been developing and producing high-quality systems since 1892. Our comprehensive range of proven machines and automation solutions allows weaving mills to optimize their production process and increase productivity.

Electrical Connectors | Fluid Connectors | Robotics | Textile

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● Stäubli Units ○ Representatives/Agents

Global presence of the Stäubli Group

www.staubli.com

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STÄUBLI