TRAPO COMPETENCE CREATES CONFIDENCE IN GLOBAL FOOD HANDLING
TRAPO AG:
Specialist in Conveying Technology | Robotic Systems | Automation

- Innovative capability and more than half a century of special knowledge determine TRAPO AG’s corporate success.
- Around 220 dedicated employees develop solutions in the TRAPO Group which are optimally tailored to the needs of the food industry.
- For the careful handling of food in care areas we offer valuable support: Our systems respond in their construction and configuration precisely to the major legal requirements on cleanliness and hygiene in food production.
- You find us with our representatives worldwide in the most important industrial metropolises.

At a Glance
| TRAPO | Partner to the Food Industry |

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Our intelligent solutions grip worldwide
From handcraft to industry: cheese is unpacked, portioned and readied for further processing.

Food Handling Demands Greatest Security

The main task of modern food processing is optimized food security. From raw goods to ready product highest standards and hygiene requirements give security for wholesome enjoyment of products. TRAPO AG is aware of the great responsibility for product quality.

We control efficiency and security

The personal need of the consumer determines worldwide the level of the product range: irrespective whether deep-frozen, ready-to-serve, in various appropriate or even seasonal packaging. In conjunction with our customers we sustainably control efficiency, convenience and security in production and logistics. We assume with precision not just applications such as palletizing, intermediate sheets or flexible range composition. We also impress in close-range Pick-and-Place applications.

Concept and control of the system

At the core of our work is the security of product quality in handling and logistics. Our experienced specialists assume the responsibility, the conceptual layout and the project steering of your new total system. With the special competence from numerous applications in the food industry we offer optimal preconditions, through practice, to develop trend-setting manufacturing processes and to implement them successfully.

Proven TRAPO Competence for the Food Industry

The products of the food industry are as unique as their handling requirements. Our systems and installations raise potential within the production processes with incomparable flexibility and performance so that our customers are equipped today and in future for growing challenges.

Our solutions – your benefit:

› Sound foundation of experience and discipline-specific sector know-how
› Total supplier of systems installed worldwide
› High system availability and process security
› Great economy
› Planning, implementation and installation from a single source
› Tailor-made conveying technology and systems
› Robot-, gantry- and palletizing systems with individually developed gripper technology
› Efficient flows with automation technology
› Security in production and dispatch – especially in a sterile environment
› Rapid reaction times: TRAPO Customized Service with 24-hour service
› Learn in the TRAPO Test Center and Training-On-The-Job

You are in safe hands with us for each phase of your project. In conjunction with you we devise exact solutions with greatest availability for various thematic areas.
Competences in the fields of conveying technology, robot systems and automation make their contribution towards responding to the increasing needs of the world’s population for constant availability of qualitatively high-grade food. Innovation, reliability, security and competence are the building blocks from which our systems derive. With these roots of more than 60 years’ experience we set standards worldwide.

Impressive from minus 25°C to extreme heat
Thanks to the employment of materials authorized exclusively for food, our solutions prove themselves in particular in high humidity and extreme temperatures – from minus 25°C to extreme heat in the oven.

Ideal solution for the hygiene design
Hygiene- and cleaning-friendliness form part of the primary demands which food manufacturers and processors set for design and fabrication. We supply systems which fulfill national and international food industry standards.

- Stainless steel components are used exclusively.
- Systems and components are designed, manufactured and tested in Gescher/Hochmoor.
- All surfaces are optimally visible and all cleaning areas are completely accessible.
- Cleaning fluids can drain and run off securely.
- Corrosion resistance makes it optimum for employment in the food industry.

The reliability and high availability of our systems decide your success: Visionary TRAPO Plant-Engineering forms the sound foundation for it.

Dialog: Customer – Project Engineering – Design
- We listen and register your plant needs.
- Depend on proven and secure structures.

Integration of Control System Development
- Mature HMI-Solutions (Human Machine Interface)
- Clear visualizations
- Employment of ultra-modern control technology

Transfer to the TRAPO technical centre
- Evaluation in real-time
- Flexible, ultra-modern process: high machine availability

Result: tailor-made solution
- Integration of our individual solutions in your process chain

Conveyors and handling devices made of in-house manufactured stainless steel fulfill the increasing demands of applications in food production.

TRAPO Project Engineering is implemented as individually as is each customer enquiry. On the path to the optimal solution all specialist teams are involved in the course of the strategic planning phase.
OUR SOLUTIONS BLEND IN FLEXIBLY WITH YOUR PRODUCTION AND LOGISTICS

TRAPO AG has its firm place in the food industry, when it comes to gently transporting, palletizing, depalletizing and packing various container sizes with tailor-made automation systems even in the tightest of spaces.

Precision work – Made in Germany
The intelligent components of our conveying- and handling systems are manufactured exclusively in our workshops in Gescher-Hochmoor/Germany. Highest quality and precision in manufacturing are the key to our success. Short delivery times are a firm component of our comprehensive, forward-looking service mindset.

Our competences – your success:
› Handling devices – transport, palletize, feed and distribute
› Solutions for fully-automatic transport and handling of products, for example in bags, crates, tins, buckets or barrels
› Application of product data for identification
› Control systems: only flawless goods reach their destination
› Single unit handling or handling of complete layers
› Various load security options

Intelligent Conveying Technology
Your in-plant material- and goods-flow alone decides which components are employed:
› All-side roller conveyors
› Belt conveyors
› Chain- and Belt conveyors
› Empty- and full-pallet conveyors
› Modular and Slat conveyors
› Reject- and Distribution stations
› Roller conveyors
› Transfers
› Turning- and accumulator tables
› Vertical conveyors

Handling systems, robot systems and grippers are precisely designed, produced and programmed for each production area in the food industry. It is oriented towards the individual complexity of the product – regardless whether ice cream, milk products, meat or hot bakery products are transported.

On the fully-automatic baking line a camera application impresses with unique TRAPO know-how: It records the coordinates of different pretzels and via robot control makes the perfect dough-prick according to dough thickness with a titanium knife.
RoboT-based PROducTion sysTems: FLEXibLE, ULTRA-PRECisE And HiGH on PErForMANCE

Robot-based production-systems act ultra-precisely: Our robot systems and grippers are designed, produced and programmed according to your specific requirements. The complexity of the product plays an important role here: We have it all under control, from deep-frozen foods through milk products to meat, confectionery and hot bakery products.

Our Robot-Systems:

Picker Robots
This robot moves products swiftly and precisely from one position to their final position. Comes recommended for delicate tasks and short distances.

Jointed-Arm Robots
4-or 6-axes jointed-arm robots most flexibly suit different well-known brands. The high-performance systems rapidly and ultra-precisely palletize, sort and pick individual items, series or complete layers.

Gantry Robots
Our high-performance gantry robots act gently on three linear axes in cubic space. We design and manufacture the gantry robots in our in-house production facilities in Gescher-Hochmoor.

We are also a specialist in gantry robots made of stainless steel for special applications in sectors which have special hygiene and anti-corrosion requirements.

Palletizing- and Depalletizing Systems
Our robot applications and systems sustainably optimize your palletizing- and depalletizing processes and can be adapted, fully automatically, to the production conditions both mechanically and with regard to control technology.

Our robots blend in perfectly with your workflows:
- Swift
- Space-saving
- Gentle product picking
- Simple/clear programming
- High availability level
- Unmatched reliability
- Multi-functional applications
- Flexible matching
- Freely selectable layer pattern
- Suitable for pallet change
- Various container types
- Optimal for swift point-to-point movements

OUR HIGHLY FLEXIBLE ROBOT SYSTEMS HELPED WRITE THE SUCCESS STORY OF THE AUTOMATED FOOD INDUSTRY.

Christian Prinz | Head of Control Technology
THE PERFECT INTERPLAY: ROBOT AND GRIPPER

Tailor-made gripper technology perfects utilization options, function and performance of a robot system.

Employment of the gripper, optimally developed by TRAPO is decisive when it comes to sustainably raising performance and quality.

Combination gripper
The time- and cost-intensive exchanging of the grippers is dispensed with: Combination grippers unite the function of several grippers. This is decisive if several tasks must be performed or if space is restricted. They adapt to different products and moreover grip pallets, tool carriers, intermediate layers or lids.

Mechanical gripper
Mechanical grippers prove themselves when sacks or other products such as barrels, canisters or cartons need handling and palletizing.

Vacuum gripper
Goods are securely picked and forwarded with vacuum grippers. Handling weights are increased by the number of suckers and matched vacuum creation.

Magnetic gripper
Magnetic grippers for ferro-magnetic materials gain their holding strength from permanent- or electromagnets. In practice, for example during handling of perforated plates, or to support suction of heavy plates.

Fork gripper
Retractable fork grippers handle open containers or larger containers.

Your production safely under control
Our robots blend into your workflows swiftly, precisely and with unmatched reliability - regardless of whether jointed-arm-, gantry- or picker robots.

› Combination gripper
› Mechanical gripper
› Vacuum gripper
› Magnetic gripper
› Fork gripper
We optimize production flows and optimally protect your products. Our systems distribute, shape, palletize and secure perfectly, even in the most restricted spaces.

**TRAPO palletizing competence:**
- Space-saving construction
- Low or high product inlet
- High availability
- Modular structure/individually matchable
- Gentle handling
- Individual item handling/Layer handling
- Outstanding, flexible load stabilization for various packed goods
- Suitable for different packed units and load carriers

**Efficient Palletizing and Depalletizing**

Profit from our numerous equipment options and customer-specific additional modules:
- Automatic feed and removal of pallets or other load carriers such as pallet cages, trays or others
- Layer recognition by image processing or sensor technology
- Highest capacity in single-pack handling or by gripping several packs/layers
- Industrial robots accomplish their tasks at maximum speed and are flexibly employable with various depalletizing patterns
- Single-origin depalletizing and storing

**All TRAPO Systems impress with the additional integration of:**
- Sack equalization
- Empty pallet-magazine with individual sorting and empty-pallet feed
- Load security in different variants
- Sealing with hot- or cold glue
- Control functions: weighers/metal detectors
- Product printing/labeling

**Equipment Options and Transport Security**

TRAPO load security takes care of different transport security systems for optimum load security:
- Wrapping machines, stretch-hooders and strapping machines of various well-known manufacturers
- Weather protection
- Low film consumption
- High energy efficiency

We mark products of all types reliably and thus enable full traceability of loads.

For stack stabilization, vacuum grippers each grip a carton and add them as an intermediate layer.

Exact palletization in potato salad production – tailor-made in the smallest of spaces and extremely low roof height.

Food production sets high hygiene standard requirements. We employ components which are manufactured in the in-house stainless steel manufacturing facility.

Our wide product range for securing your products also comprises fully-automatic pallet wrappers with many optional extras fitted.
Deliberate economy, highest hygiene standards, reproducible quality and exact goods handling go hand in hand when our solutions for automation of various foods master manifold tasks.

**Individual safety precautions**

In optimized production processes intelligent systems communicate with each other and with the products. This planning and interlinking requires, apart from programming, special protection and individual safety precautions. TRAPO competence creates trust there and offers a decisive safety-plus: with in-house developed solutions and proven systems.

As the main contact we coordinate control technology and the hardware for conveying and robot systems as well as for palletizing systems and load security – and create impressive solutions.

**Multi-talent image processing**

Image processing supports efficient and smooth material flow. Cameras recognize products, identify parts and act independently within the programmed assignment. These precise, application-specific solutions are individually matched to the demands of the food industry.

control and visualization technology

The TRAPO control- and monitoring software unites the control of all systems on a clear central or decentralized terminal.

▸ High system availability
▸ Reliable system-diagnosis
▸ Clear visualizations for each system component
▸ Fully-automatic display of maintenance intervals

FOR THE CONSUMER, TASTE IS THE MOST IMPORTANT QUALITY CHARACTERISTIC. IT IS OUR TASK TO MAINTAIN AND PROTECT THIS IN AUTOMATED PRODUCTION!
ACT RESPONSIBLY:
ENERGY- AND ENVIRONMENTAL MANAGEMENT

TRAPO AG’s work serves humankind and the environment. At the Gescher-Hochmoor site excellent products and services are developed. Gentle handling of resources is taken for granted.

All TRAPO AG employees consider themselves dedicated to sustainability, to the responsible and economic handling of raw materials.

As a dependable partner, TRAPO AG’s approach is characterized by the goal of offering highest product quality and optimal service. This guiding principle gives orientation to employees, partners and customers of TRAPO AG.

› Ecologically responsible approach
› High transport security
› Resource-conserving drive technologies
› Low energy consumption – maximum economy
› Employment of environment-conserving materials
› Employment of repeatedly recyclable packaging materials

Competence within one’s reach: the TRAPO Test Center

We develop in collaboration with you optimal solutions and put all functions to the test in our TRAPO Test Center under real conditions.

Measure our competences:

› Application-specific, expedient consulting on site
› Test of quality and performance
› Realistic flows with your own products
› Analyses in real-time
INDIVIDUAL SOLUTIONS: TRAPO INTRALOGISTICS

In the core areas of dispatch preparation, storage logistics and loading we stand at our food industry customers’ side with individual, high performance solutions in the fields of conveying technology, robot technology and automation.

TRAPO Logistic Systems:
Planning, supply and installation of all system components for
› Central product collection
› Perfect palletizing
› Shelf-loading
› Labeling/Load-Coding
› Warehouse-Technology
› Dispatch preparation
› Carrier-preparation

For the retail sector we make up ice-cream batches of both single, as well as mixed varieties.

OUR INDIVIDUAL SERVICE CAPABILITIES: TRAPO CUSTOMIZED SERVICE

As a total system supplier we are at your side when you plan your new installation or optimize existing manufacturing processes. Our self-conception is your profit: Our 360° maintenance concept offers comprehensive service and holistic support – throughout the entire life cycle of your systems.

Choose from our broad Service-Portfolio exactly the services you need:

Talk to us. We will gladly advise you!

Our intralogistics specialists know all about the competitive advantage of leaner, individual automation processes in your manufacturing.

Our 360° maintenance concept offers comprehensive service and holistic support – throughout the entire life cycle of your plants. The scope of this covers consulting on the optimum spare- and wear-parts in original quality, training, repair service as well as repair and maintenance.
WE ARE PRESENT WORLDWIDE WITH OUR OWN REPRESENTATIVES: TRUST IN PROVEN SYSTEMS, CREATIVE COMPETENCE TEAMS AND OUR SECURE INSTINCT FOR FUTURE TECHNOLOGIES.

Clemens Espendiller | Sales

Our Intelligent Solutions
Grip Worldwide

We are your perfect partner for all automation projects within the food industry. In collaboration with you we devise exact highest availability solutions for various thematic areas.

We supply worldwide - gladly even one step further - into a jointly successful future!