TRAPO AG:
Specialist in Conveying Technology | Robotics | 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 tasks of intralogistics.

› For careful in-house transport and warehouse-management we offer valuable support: Our systems respond in their construction and configuration precisely to the great demands of optimized, in-house material flow.

› You will find us worldwide with our representatives in the most important industrial metropolises.

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**PROVEN TRAPO COMPETENCE FOR INTRALOGISTICS**

Digitalization and automation shape the flows in production and logistics. Robot-based automation with individual gripper- and sensor technology optimizes in-plant material flow. Our systems and installations raise potential within the production processes with incomparable flexibility and performance so that our customers are equipped for today and in future for the 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
› Rapid reaction times: TRAPO Customized Service with 24-hour service
› Learn in the TRAPO Test Center and Training On-The-Job

**INTELLIGENT MATERIAL FLOW DEMANDS GREATEST SECURITY**

Automation technologies enable economic, efficient production and capacity expansions in manufacturing. Modern production demands solutions, in order to optimize physically strenuous tasks or activities which lead to errors owing to repetitive, monotonous procedures. TRAPO AG has perfected secure collaboration between human and robot.

Concept and system control

The security of product quality in handling and logistics takes center stage in our work. Our experienced specialists assume the responsibility, the conceptual layout and the project management of your new total system. With the special competence from numerous applications in intralogistics we offer optimal preconditions, through practice, to develop trendsetting manufacturing processes and to implement them successfully.

Human-Robot-Collaboration

With Human-Robot-Collaboration (MRK) human and machine jointly assume assignments, for example for accurate palletizing, depalletizing and packing.

Here robots, whose hitherto activity space was limited to special safety zones, perform while positioned on mobile tool-boxes which can be docked at manual work-stations. These robot assistants recognize humans and grip “hand in hand” – without presenting a risk of injury.

› 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.

› Experienced TRAPO teams assume responsibility when it comes to developing and successfully implementing automation concepts for special sectors.
COMPETENCES SHAPE MODERN INTRALOGISTICS

Competences in the fields of conveying technology, robotics and automation contribute to perfecting intralogistical flows. When we assume responsibility for the process-based total design of production logistics, our solutions are as individual as our customers’ products: individual unit goods of various shapes and configuration, cartons, packs, rolls of fabric, white goods, vegetable products but also passenger cabins for shipyards, just to mention a few.

We have special competences regarding product monitoring, evaluation and product tracking.

Your security benefit: Our additional competence in product tracking within your entire manufacturing process. We accompany you in intralogistics from production to dispatch.

FROM INDIVIDUAL ENQUIRY TO TAILOR-MADE SOLUTION

Reliability and high availability of our systems decide your success: Forward-looking TRAPO systems-engineering creates 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 center
› Evaluation in real-time
› Flexible, ultra-modern process: high machine availability

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

With individual sector solutions we perfect intralogistical flows.

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.
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

When goods-flows need to be organized just-in-time it requires professional, secure distribution paths. The conveying technology portfolio with which we respond to every task efficiently and faultlessly is as broad and unique as your sector and your production lines.

Our solutions blend in flexibly with your production and logistics

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

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.

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, pails or barrels
- Application of product data for identification
- Control systems: innovative process for avoidance of picking and placing errors
- Various load security options
- Highly efficient, intelligent in-house transport including warehousing

24V technology

The 24V motorized roller is perfectly matched to the needs of intralogistics. The rollers convey in an energy-saving manner, as quiet as a whisper and with low wear, moreover they save space as no drive station is required.

Your benefits:

- The motorized roller replaces the conventional drive
- Expandable in modules
- Energy saving conveying
- Easy installation
- Low maintenance and wear
- Autonomous drive or via SPS
- All conveyors can be manufactured in the in-house high-grade steel production facility, also in a stainless version.

Ideal areas of application of 24V technology are buffer sections where an optimal degree of filling of the conveying line is achieved in the waiting position.
ROBOT-BASED PRODUCTION SYSTEMS: FLEXIBLE, VERY PRECISE AND HIGH ON PERFORMANCE

Robot-based production systems act most 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: Whether minus-temperatures or extreme heat: We have it all under control.

Our Robotic Systems:

Picker Robots
This robot moves products swiftly and precisely from one position to their final position. 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 Geischer-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 INTRALOGISTICS.
For precise gripping and secure handling in the automobile industry, robots and individual grippers are both recommended and proven.

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

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.
EFFICIENT PALLETIZING AND DEPALLETIZING

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
› Individual item handling/Layer handling
› Single-origin palletizing on Euro- or industrial pallet/pallet exchange
› Outstanding, flexible load stabilization for various packed goods
› Suitable for different packed units and load carriers

Layer formation and stack height require flexible, programable palletizing processes.

The vacuum gripper places the intermediate layer. It ensures a stable, optimum layer formation with perfectly sitting products. Shifting or falling is precluded.

More efficiency: While the first palletizing procedure is in progress, the following one is readied: Via the pallet magazine an empty pallet is fed and readied for palletizing.

EQUIPMENT OPTIONS AND TRANSPORT SECURITY

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/ayers
› 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:
› Bag 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

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.

Our wide product range for securing your products also comprises fully-automatic pallet wrappers with many optional extras fitted.
We IMPRESS WITH INTELLIGENT, TAILOR-MADE TRANSPORT STRATEGIES WHICH OPTIMIZE THE FLOWING TRANSFER BETWEEN PRODUCTION, INTRALOGISTICS AND DISPATCH.

All Under Control: TRAPO Automation Technology

We shape trendsetting solutions – in order to transport goods efficiently, securely and in an environmentally-caring manner. TRAPO AG as a strategic partner offers tailor-made solutions in the field of automation and know-how of conveying technology from equipping to traceable documentation. When optimizing existing production flows we guarantee that transport- and logistics chains are optimally meshed.

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 advantage: 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 fully automatically within the programmed assignment. These precise, application-specific solutions are individually matched to the demands of intralogistics.

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

› Our self-conception: Transport goods securely and efficiently.

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

WE DEVELOP IN COLLABORATION WITH YOU OPTIMAL SOLUTIONS AND PUT ALL FUNCTIONS TO THE TEST IN OUR TRAPO TEST CENTER UNDER REAL CONDITIONS.

Dr. Stefan Kurtenbach | Head of Research & Development

Competence within one’s reach: TRAPO Test Center

- 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 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

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

TRAPo AG is partner to global intralogistics, regardless of whether a total concept or individual process should be optimized. Design, manufacture and installation are implemented from a single source.

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:
- Training-On-The-Job
- Remote diagnosis via Help Desk
- Production Support
- Maintenance and Repair On Site
- Retrofits and Upgrades

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 through our mobile Service Team.

Talk to us. We will gladly advise you!
WE ARE PRESENT WORLDWIDE WITH OUR OWN REPRESENTATIVES: TRUST IN PROVEN SYSTEMS, CREATIVE COMPETENCE TEAMS AND OUR SECURE INSTINCT FOR FUTURE TECHNOLOGIES.  

Thomas König | Sales

OUR INTELLIGENT SOLUTIONS
GRIP WORLDWIDE

Your intralogistics are more capable than you think: As the perfect partner, with flexible components we implement automation projects in manufacturing and warehousing worldwide – for sustainable efficiency.

We Move Your Success
We supply worldwide – gladly even one step further – into a jointly successful future!