

**Live at LogiMAT 2024: (De)palletizing CRATES with space-saving portal**

**TRAPO finds solutions for the sustainable handling of crates**

**Last year, the TRAPO GmbH team stood on the winners' podium: The autonomous TRAPO TLS 3600 loading system was awarded "Best Product" in the "Identification, Packaging and Loading Technology, Load Securing" category. The team took this prestigious intralogistics industry award as an incentive to present another innovative solution live: At LogiMAT 2024 in Stuttgart from 19 to 21 March, the company will be showcasing a cycle for palletizing and depalletizing crates in Hall 5, Stand 5D53.**

The tongue-in-cheek live performance at the TRAPO stand is eagerly awaited by trade visitors every year. Don't forget to press the buzzer and take part: We offer you top performance!

Reusable crates can be used universally in intralogistics. The standardized design features prove themselves in highly automated production processes and complement sophisticated warehouse management.

TRAPO uses a portal to optimally pick up and move the crates containers. These heavy-duty giants are traditionally used to optimally fill the height of the production hall over long, straight distances. In Stuttgart, the six-meter-high gantry shows a new side: at the trade fair, it operates with highly efficient performance in a limited space.

The gantry is equipped with a maintenance-friendly clamping jaw gripper with high gripping force. The task: to pick up four crates each and transfer them to conveyor technology - two directly onto the roller conveyor, two are buffered in parallel and then pushed off. This creates a continuous sequence for final stacking and palletizing.

**Pioneers of conveyor technology**

The company's success is based on expertise in conveyor technology: Since 1957, TRAPO in Gescher-Hochmoor, Münsterland, has been manufacturing customized conveyor technology elements for every task and industry in order to sustainably optimize the flow of materials in production and intralogistics.

Crates containers are used in many sectors: from the food and pharmaceutical industries with care and high hazard areas to the automotive and mining industries. TRAPO patented a multifunctional gripper for crates back in 2016.

The gantry palletizer presented is already proving itself in practice: crates are fed within a line at a speed of up to 800 boxes per hour.

Central depalletizing and palletizing is handled by the high-performance gantry system on show, the transport technology consists mainly of roller conveyors, and in practice several production machines can be connected.

### **TLS 3600: New features and functions of the autonomous truck loading and unloading**

A TLS 3600 replaces the task of a maximum of two loading forklift trucks, which would have to cover the distance three times as often - with an enormous risk of accidents.

The new generation of autonomous loading and unloading takes customer requirements and practical findings into account:

- In addition to box trucks, vehicles with tarpaulins can now also be loaded and unloaded autonomously.
- Driving has been optimized and made more agile.
- The load on the most heavily loaded axle results in optimized driving behavior.
- The new lifting concept is a telescopic, more load-bearing application with three lifting steps. Three Euro pallets can be loaded lengthways or - by manually repositioning the outer tines - two Euro pallets can be loaded crossways in one go.
- In the latest TLS generation, the shortened control cabinet is located in front of the counterweight, including an extendable assembly platform to simplify service work.
- A new localization concept ensures greater safety in the system. In the plug and play solution, the navigation software has been optimized and the number of software modules significantly reduced.
- As part of the further development, the electrical system has also been given a modular design: the autonomous loading and unloading system effortlessly withstands three-shift operation.

### **TRAPO Experience Hubs with high practical relevance**

TRAPO enables the perfect interaction of conveyor systems, robots, customized gripper technology as well as palletizing and depalletizing systems. The sales team reflects this expertise in the TRAPO Experience Hubs.

The sales team will answer all detailed questions in exclusive lounges at LogiMAT.

***Special (de)palletizing expertise:*** *In addition to conventional solutions with articulated arm and gantry robots, the TRAPO team will be providing information at LogiMAT about the flagship, the HLP 6000 high-performance layer palletizer, which can be tailored to any production environment.*

**Robots with individual gripper technology:** To perform the required task perfectly, robot applications need the perfect equipment. Individual gripper technology influences and increases performance, adapted to the industry, product and package.

**Transparency with image recognition / visualization:** The 3D coordinates collected by the camera in machines and systems are both transmitted to the robot's control system and used for evaluations by the ME system TIM (TRAPO Intelligent Management System).

**1 System | 1 Control:** When mechanics and controls are adapted to the respective production task from a single source, this reduces sources of error and saves the time-consuming coordination of several service providers. At TRAPO, a central point of contact coordinates all matters - from design to production and commissioning to after-sales service, for the entire life of the machine.

**Application in the clean room:** When mechanics and controls are adapted to the respective production task from a single source, this reduces sources of error and saves the time-consuming coordination of several service providers. At TRAPO, a central point of contact coordinates all matters - from design to production and commissioning to after-sales service, for the entire life of the machine.

**TRAPO-Pack:** The proprietary software configures the optimum layer pattern from the dimensions of the package and the pallet - for perfect stack formation as the basis for stable shipping units. Once generated, layer patterns are optimized on the monitor. Layer patterns and pallet loads can be configured by the user and saved for subsequent palletizing processes.

#### About TRAPO Facts / Figures / Data

TRAPO GmbH is a partner for industrial automation. In production, TRAPO is a system solution provider in defined market segments - with excellent products and product solutions that meet the needs of end customers, system suppliers (OEM/original equipment manufacturers) and machine builders. They are complemented by products from partners in the packaging and load securing sectors.

In the warehouse and e-commerce sector, TRAPO is a partner for innovative and standardized products and product solutions. Storage and order picking on the customer side is supplemented with excellent conveyor sorting and palletizing technology. For end customers or system providers (OEM/original equipment manufacturers), the company also implements autonomous loading and unloading solutions for trucks.

The company places a particular focus on digital solutions: with the ME system TIM, the TRAPO Intelligent Management System, for visualizing, monitoring and controlling systems.

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