Space-saving, strong and ready for use

The compact class of TRAPO robot palletizers

TRAPO will be presenting the new compact class at FACHPACK this autumn: from entry-level models to space-saving high-performance palletizers. Based on decades of palletizing expertise, the company from Gescher-Hochmoor in Westphalia will be presenting compact class articulated arm robots that can be flexibly adapted to any spatial situation live in Hall 3C, Stand 551 from 24 to 26 September.

Optional: All palletizers in the series are available in a food-compliant version. Accordingly, all models in the current compact class with this option have FDA approval (Food and Drug Administration according to the US authorities).

The robots are inserted into existing spaces "like with a shoehorn" - ideal for existing production halls with a ceiling height of 2.60 meters. The robust, space-saving compact class is starting the new trade fair season with three sophisticated models.

For the end-of-line palletizers, which are used at the end of a production or packaging line, TRAPO uses articulated robots from the High-Speed Robot System Series (HRS Series) plus multifunctional grippers. The compact class of robotic palletizers is designed to optimize production processes as well as product handling and productivity. Thanks to a modular system, there are numerous options for meeting individual automation requirements.

With three basic models, the compact class offers solutions for palletized goods such as buckets, bags, drums, cans, cartons, canisters and more. As an experienced partner, TRAPO complements the palletizing line with AMR expertise, pallet buffer systems (sequencers) and automated truck loading with the **TRAPO TLS 3600** loading system, for example. The company specializes in the needs of the food and pet food industry.

The three models in the TRAPO compact class

Small robot for big relief: **The TRAPO Cobot Palletizer (TCP)** fits through any door - the performance model for easy entry into automated palletizing. Supplied on just two pallets, the mobile robot, which can act as a "colleague" without a fence, is used wherever its palletizing performance is required. At the same time, TRAPO is providing a convincing answer to the shortage of skilled workers with the Cobot: employees who previously palletized manually can now be deployed elsewhere in production!

Features

- Fully automatic palletizing, removal and transfer of pallet goods
- 230 V / 16A
- Robust construction
- Compact design / footprint with 2x Euro pallets incl. intermediate layers = 2500 x 2750 mm
- Output: up to 6 cartons / minute
- Gripper of the trade fair exhibit: vacuum suction cup
- (supply via compressed air or compressor, feed in robot arm)
- Can be used for a wide variety of packs and stacking and layer patterns
- Output at floor level for easy removal by hand pallet truck
- Optional: layer pad handling

The **HRS compact palletizer** also represents the next generation of articulated robots used for precise palletizing.

Features:

- Fully automatic palletizing, removal and transfer of pallet goods
- 400 V / 33A
- Suitable as an end-of-line solution
- Intelligent control system; easy-to-operate HMI
- Robust construction
- Compact design / footprint 3600 mm x 6130 mm
- Output: up to 28 cartons / minute (with 4 products per run)
- Can be used for a wide variety of packs and layer patterns
- Output at floor level for easy removal by hand pallet truck
- Optional: layer pad handling
- For EURO pallets, optional industrial pallets

Robots from the HRS series are the basis for requirements with high palletizing performance.

Features:

- Fully automatic palletizing, removal and transfer of pallet goods
- 400 V / 33A
- Suitable as an end-of-line solution or for connection to a conveyor system
- Intelligent control system; easy-to-operate HMI
- Robust construction
- Footprint 5800 mm x 11760 mm
- Output: up to 33 cartons/minute (with 4 products per run)
- Gripper of the trade fair exhibit: Equipped with a tine gripper
- Can be used for a wide variety of packs and layer patterns
- Optional: turning station / layer pad handling / empty pallet magazine
- For EURO and industrial pallets

The compact class: equipped with individual grippers

Robot applications need the perfect equipment to perform the required task perfectly. Proven gripper technologies influence availability, increase performance and protect the product.

End-of-line palletizing - integrated into reliable conveyor technology

The entire process is supported by a reliable roller conveyor. This not only ensures that the products are fed in smoothly, but also that the pallets are provided in an orderly manner. As an option, the palletizers can be supplied with empty pallets via a robust empty pallet magazine to stabilize the workflow.

All robots in the compact class deliver the pallets via conveyor technology at floor level - from there they can be removed manually using all standard pallet trucks.

Precise and efficient: layer pad handling

The flexibility of the compact class is enhanced by the optional layer pad handling. This can be carried out either as an integrated additional function on the robot's gripper or via a separate swivel arm, which handles the layer pads separately from the actual palletizing process. This additional sheet feeder further increases the performance of the palletizing process.

TRAPO palletizing software for freely selectable stacking patterns

Companies in the packaging industry are taking a further step towards automation with the TRAPO PACK software. This efficient, easy-to-use palletizing 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

TRAPO teams automate production and intralogistics worldwide, install machines, partial and complex systems: for (de)palletizing, packaging, conveying, warehousing, sorting and distribution technology as well as autonomous loading and unloading.

Over 65 years of expertise in mechanical engineering make TRAPO GmbH the perfect partner for all tasks in the packaging industry. Whether a new or existing system: thanks to the modular design, the systems can be individually configured for production and intralogistics areas.

TRAPO has had its own stainless steel production facility for over 50 years, where components for use in care areas are manufactured in accordance with hygiene design specifications. With its expertise in the automation industry, TRAPO has also established itself as a partner to the food and pharmaceutical industries.

The aim of the tailor-made, individual automation solutions: The harmony between economic success and the humanization of workplaces. Wherever possible, TRAPO

engineers take sustainable solutions into account, for example in the conscious use of resources.

TRAPO GmbH is headquartered in Gescher-Hochmoor in North Rhine-Westphalia. A sales office for Scandinavia is located in Denmark. In addition, TRAPO GmbH has representatives worldwide and is present at all important industrial locations.

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