



TRAPO >>>

Automated Intralogistics

PERFECT GRIPPER ACTION: WERNSING SALADS SAFELY PALLETIZED

This articulated arm robot palletizing system ensures the high transport safety of seasonal delicatessen salads for Wernsing Feinkost GmbH.

For over 50 years, TRAPO stainless steel production has been creating elements for use in care areas. This palletizing solution, which accurately stacks delicatessen salads, is one of them.



HRS Series >
High-Speed Robot System

THE CUSTOMER

Wernsing Feinkost GmbH offers a fine selection of high-quality food products. Being able to produce these foods in a resource-saving and sustainable manner, requires an efficient and energy-optimized production process. As TRAPO, we are proud to make our contribution through automation.

THE ORDER

Whether it's year-round or seasonal business, the task is to ensure the safe, clean transport of salads filled in containers even during peak sales periods – and to implement the individual task in the tightest available space.

TASK

Wernsing Feinkost required a solution for high-performance palletizing of individual plastic containers of different volumes – from two to 5 liters. The shape of the container involves a high risk of tipping. A task that the test team faced in the TRAPO Technical Center.

TAILOR-MADE SOLUTIONS FOR THE FOOD INDUSTRY

HYGIENE DESIGN FOR THE FOOD INDUSTRY

For 90 percent of the Germans, potato salad is the quintessential barbecue garnish – and it can come straight from the refrigerated shelf. In delicatessen salad production, manufacturers are expected to meet the highest hygiene standards – which we fulfill with customized hygiene solutions for the food industry.

PREREQUISITE FOR AWARDING THE CONTRACT

The company was looking for a precisely fitting palletizing solution for the accurate stacking of delicatessen salads.

- › Perfect layer pattern/secure transport stacks
- › Multifunction gripper for special solution
- › Safe stacking of layers on pallets
- › Precise placement of containers in lid troughs
- › Interlayer handling

THE SOLUTION

Delicate special solution for safe delicatessen salad transport

HRS Series ›
High-Speed Robot System

The central benefit of modern food processing is optimized safety through automated processes. Food manufacturers are responsible for product liability, TRAPO specialists design flawless intralogistic processes.

With respect for the mission to transport food safely to the consumer, complex lines are created – from production to the loading ramp. At Wernsing Feinkost, the first step is to bring together delicatessen containers arriving from two lines on a conveyor belt. There, the articulated arm robot with a multifunction gripper takes over the safe stacking of the layers on pallets.

- › The German's favorite side dish at the barbecue: Potato salad is carefully palletized at Wernsing before being delivered to retailers.



THE IMPLEMENTATION

Danger of tipping averted – safe gripping, stable stacks

- › The containers filled with potato salad are transported to the gripper via a conveyor belt.
- › The gripper places the containers to be stacked centrally and accurately in the trough of the lid recess of the salad container below.
- › A special solution developed in the TRAPO Technical Center: To eliminate the risk of the salad containers tipping over, the robot grips the container at an angle and moves precisely to the set-down position. The gripper then lightly jogs the layer, each consisting of four containers, and uses this counterforce to gently press the product into the nest of the lower lid of the already palletized layer with absolute accuracy.
- › After every two finished layers, vacuum grippers with different levels suck in a single, stable intermediate layer at an angle to place it exactly.
- › Dislocation or falling off in the warehouse, during transport and at retail are ruled out.



- › Vacuum grippers with different levels each grip an intermediate layer, which provides additional stability between the layers.



PALLETIZING WITHOUT LOSS OF TIME - STREAMLINING PROCESSES

When the last row has been deposited, an empty pallet is already fed via the pallet magazine, ready for renewed palletizing.

- › Food production places high demands on hygiene standards. Housing and operating panels are made of stainless steel.

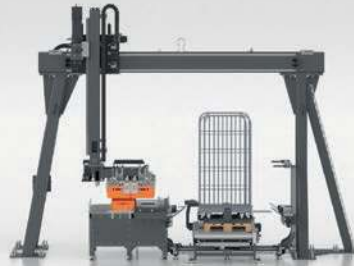
- › Four containers run up in front of a barrier, which – precisely aligned – are taken over as a row by the gripper and perfectly placed.



THE RIGHT SOLUTION FOR YOUR PRODUCT



HLP Series >
High-Speed Layer Palletizer



HPS Series >
High-Speed Portal System



HRS Series >
High-Speed Robot System

LET'S TALK ABOUT (DE-)PALLETIZING!

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