TRAPO

Automated Intralogistics

FOUR PLANTS. ONE PALLETIZING PRINCIPLE. UP TO 2,032 CRATES PER HOUR.

HOW TRAPO STANDARDIZED THE END-OF-LINE LOGISTICS OF A MEAT AND CHARCUTERIE MANUFACTURER

KEY FACTS

- **4** plants in Switzerland
- Mixed handling of E2 and C2 crates
- Fully automated palletizing
- Site-specific depalletizing
- Up to **2,032 Kisten** crates per hour
- Standardized technical platform

STANDARDIZE WHERE IT MATTERS. ADAPT WHERE NECESSARY.

A leading European manufacturer of meat and charcuterie products wanted to make its end-of-line logistics at four Swiss sites more efficient, flexible and future-ready.

TRAPO developed a modular automation concept based on hygienic design principles:
The palletizing process was standardized across all four plants, while the depalletizing technology was specifically adapted to local material flows, space constraints and levels of automation.
The result was a common technical platform that also accommodates the specific operational requirements of each individual site.

MEAT PROCESSING:
HIGH THROUGHPUT MEETS STRINGENT HYGIENE REQUIREMENTS

CHALLENGE

In the meat processing industry, short time windows, fluctuating volumes, rush orders, labor shortages and cost pressure are part of everyday operations. At the same time, material flows must remain stable—even when crates arrive in mixed sequences or multiple product flows need to be processed in parallel.

The customer required a solution capable of handling high standard throughput just as reliably as seasonal peaks and prioritized rush orders.

In addition, the four plants differed in terms of available space, empty-crate supply and level of automation. The depalletizing process therefore had to be adapted locally without unnecessarily fragmenting operation, maintenance or future expansion.

REQUIREMENTS

- Process E2 and C2 crates in mixed operation
- Enable standard and rush orders to be handled in parallel
- Ensure high process reliability with changing material flows
- Create a common technical platform for operation, maintenance and expansion—despite different depalletizing processes
- Relieve employees from heavy and repetitive tasks
- Ensure hygienic system design

STANDARDIZED PALLETIZING.
SITE-SPECIFIC DEPALLETIZING.

SOLUTION

TRAPO implemented an end-of-line concept in stainless steel that combines proven standard components with site-specific customization. The complete palletizing and depalletizing system was designed in advance using CAD to precisely coordinate performance, layout and accessibility.

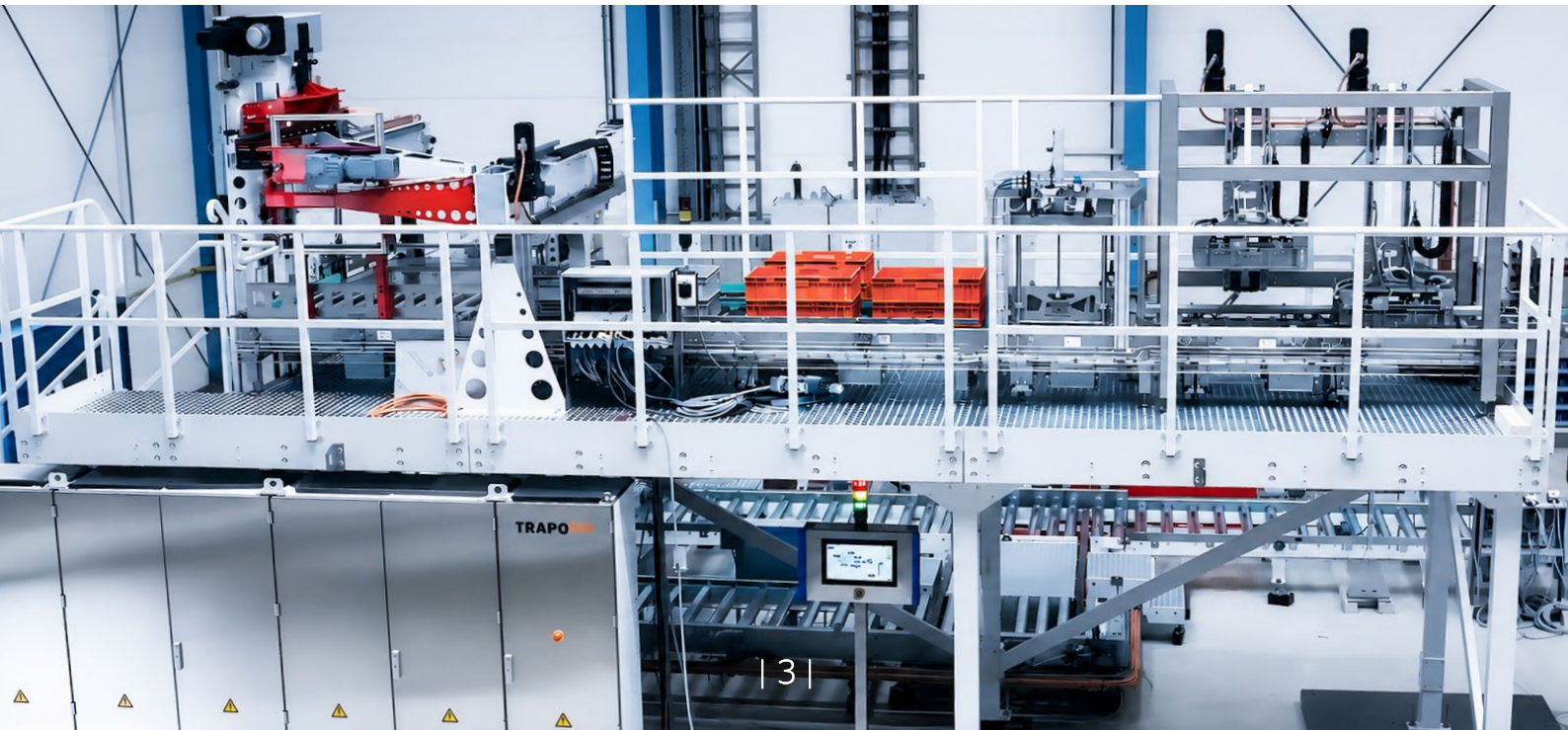
At all four sites, high-performance layer palletizers handle the palletizing process. To achieve high cycle rates, two layers can be processed simultaneously. Integrated stacking technology allows crates to be stacked in pairs and supports a continuous material flow.

The depalletizing process was implemented differently depending on the site—from the manual transfer of individual crate stacks to fully automated layer-by-layer depalletizing with separation and multi-lane onward conveying.

THE PRINCIPLE

One common technical concept—with configurations tailored to each site.

- Manual stack transfer with automated onward conveying
- Fully automated layer removal with separation and two-lane distribution
- Parallel removal of four crate stacks from empty-crate pallets



HIGHER PERFORMANCE, MORE STABLE PROCESSES, LESS MANUAL HANDLING

RESULT

In high-performance operation, the system processes up to 2,032 crates per hour. This enables it to handle maximum throughput as reliably as flexible operating conditions involving changing material flows, rush orders or seasonal peaks.
The decisive benefit goes beyond speed. The solution combines throughput, hygiene, availability, ergonomics and scalability. Heavy lifting and repetitive tasks are reduced, employees are relieved and process quality is stabilized.
The site-specific depalletizing concept plays a particularly important role in stabilizing the supply of downstream processes. Crate stacks and layers are transferred as required, separated and conveyed onward in one or more lanes. This reduces manual transfers, allows different material flows to be processed in parallel and prevents potential bottlenecks at the beginning of the process.
The processes are controlled and monitored using TRAPO software. It coordinates individual process steps, provides traceability and creates transparency for the optimization of logistics processes and system availability.

BENEFITS FOR DECISION-MAKERS

- **Technical Management:** robust integration into existing processes
- **Production Management:** fewer bottlenecks and more stable cycle times
- **Operations Management:** improved planning reliability despite fluctuating volumes
- **Procurement:** a standardized and expandable investment
- **Plant Management:** future-ready end-of-line logistics

SYSTEM DATA

Industry: Meat and charcuterie production

Sites: Four plants in Switzerland

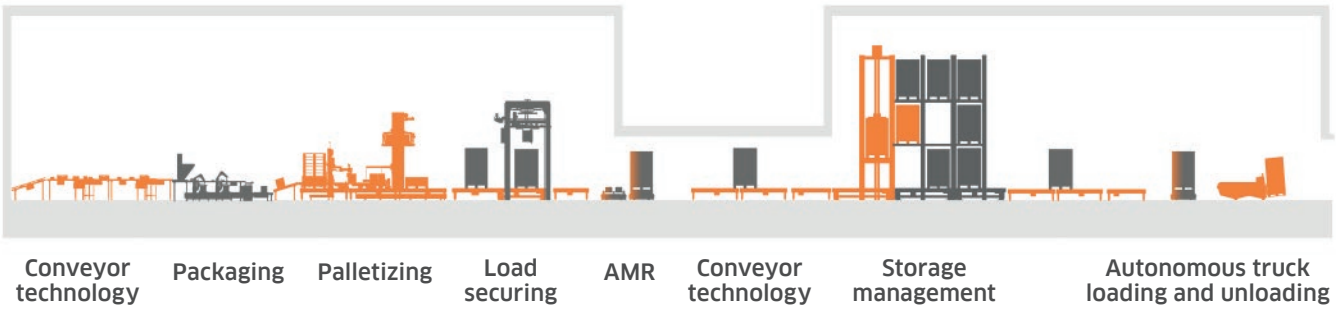
Load carriers: E2 and C2 crates

Processes: Fully automated palletizing as well as depalletizing of individual stacks, complete layers and multiple crate stacks in parallel

Design: Hygienic design / stainless steel

Performance: Up to 2,032 crates per hour

THE RIGHT SOLUTION FOR YOUR PRODUCT
FROM CONVEYOR TECHNOLOGY TO INTEGRATED AUTOMATION



GET IN TOUCH WITH US!

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