

Automated palletizing

HKScan: A customized solution for a unique challenge.



The automatic palletizing solution for the leading Nordic food company HKScan consists of a number of light-duty conveyors, lifts, pallet conveyors, transfer carts, pallet wrapper and robot palletizer. The ability to handle both bale arm crates and assorted cartons in various layer patterns makes the solution unique.

The customer

Driven by a demand for streamlining the dispatch, increasing production volume and improving ergonomics, HKScan – one of the leading operators in the Scandinavian meat sector – chose to invest in an automated palletizing solution supplied by Körber.

At HKScan's production unit in Vinderup, 170–180,000 Danish chickens are slaughtered and processed every day. In the past, HK Scan's dispatch has been a highly manual operation due to worn-out equipment and a lack of capacity. This also meant that the ergonomics and data collection have not been optimum.

At a glance

Project goals

- Improved ergonomics
- Higher flexibility
- Higher palletizing throughput

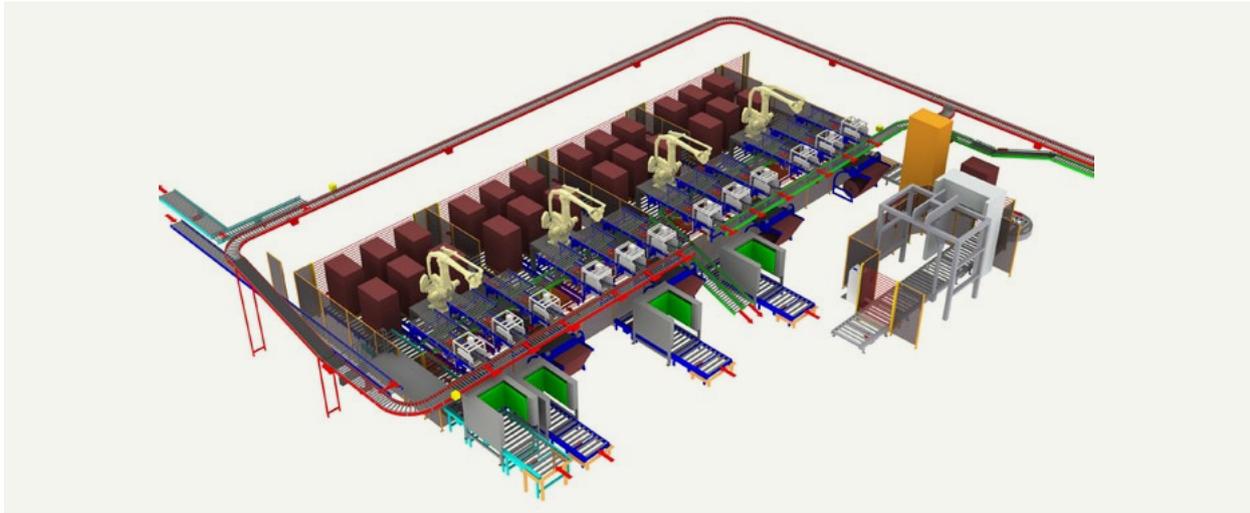
Solution

- Light goods and pallet conveying.
- Outbound robot palletizing.

Features and benefits

- Fast return on investment
- Highly efficient solution
- Fully automated





Automating dispatch was seen as a difficult task, due to the complex mix of products in various carriers, combined with high volumes and the limited space available. The many different layer patterns combined with the assortment of cartons in various sizes and plastic crates with bale arms made it a challenging project. The solution was a system from Körber with four palletizing robots.

Rasmus Erkstrøm Christensen, PTA Manager at HKScan, states: “Due to the new equipment from Körber, our production unit at Vinderup has achieved higher palletizing efficiency and has thus saved staffing costs. Furthermore, we have eliminated monotonous, repetitive work tasks and have thus also improved the working environment significantly. The new equipment is integrated with our production’s IT systems and contributes to ensure that we have full product traceability”.

Solution

The system is a combination of Körber’s many proven solutions. It consists of a number of light-duty conveyors, lifts, pallet conveyors, transfer carts, pallet wrapper and robot palletizer. The robot palletizer and the corresponding layer make-up uses a combination of standard equipment and solution-specific adjustment. The ability to handle both bale arm crates and assorted cartons in various layer patterns makes the Körber solution unique. It renders the solution optimum for the current product mix, and at the same time flexible for future changes in volume and products.

“Throughout the entire process from purchase to start-up, we have had a positive and constructive cooperation with Körber, characterized by a good understanding of our situation, where we had to implement the new equipment while at the same time making the day-to-day running work. We encountered high flexibility from Körber through the entire process which has resulted in a minimal number of adjustments subsequently being required.”

Rasmus Erkstrøm Christensen
PTA Manager at HKScan

Facts and figures

Load type

- Handling of cartons and bale arm plastic crates
- Handling of EURO pallets (wooden and plastic), UK pallets and intermediate pallets

Equipment

- Four palletizing robots with corresponding layer building equipment
- One transfer cart for supply of various empty pallets
- One transfer cart for removal of full pallets
- One pallet wrapper

Throughput

Up to 3,500 units per hour, up to 60 pallets per hour

