

Pallet quality inspection system

Asko: A quality inspection system beyond the human eye.



With the installation of Körber's pallet quality inspection system, ASKO, Norway's largest grocery wholesaler, has achieved improved productivity, improved ergonomics and better quality sorting.

The customer

ASKO is Norway's largest grocery wholesaler and a part of NorgesGruppen. ASKO ensures effective distribution of products to the grocery, retail convenience goods and institutional catering sectors. The department ASKO NORD AS is located in Ramfjordbotn in Tromsø municipality, and is one of Northern Norway's largest companies, with an annual turnover of 3+ billion NOK, and 170 employees.

ASKO NORD needed to improve ergonomics by automating the heavy lifting of pallets between 20 and 25 kilograms.

At a glance

Project goals

- Optimization of quality control
- Improved ergonomics

Solution

- Pallet quality inspection

Features and benefits

- Controls and sorts up to 200 pallets per hour
- Eliminates stops down the line due to broken pallets
- Sorts different types of pallets
- Checking of blocks, boards, runners and nails
- Separates rejected pallets from approved pallets
- No manual handling of pallets



Solution

With the Körber pallet quality inspection system, ASKO NORD gained improved productivity, improved ergonomics and better quality sorting. Mixed stacks of empty wooden and plastic (NLP) pallets are loaded, automatically destacked and sorted in the pallet magazine. At this point, NLP pallets are ready to go, and the wooden pallets proceed down the roller conveyor.

At first they pass through a nail press, pushing any protruding nails back into the pallet. After the nail press, the pallet is centered and conveyed through the pallet check station for a quality check. Finally, pallets are sorted and stacked depending on quality, and are ready to go to the pickup position (in stacks of 16 pallets). Before installing the system on site, a 1:1 prep test (FAT test) was performed at Körber Supply Chain in Denmark. ASKO NORD was invited to experience all the functions in action and to approve the system. This resulted in a very short installation time, which did not disturb the production more than necessary.

Results

By automating pallet sorting, ASKO NORD has saved one full-time job role. Now one single employee can carry out the task, whose job is to monitor the machine as it performs careful, high-capacity and ergonomic handling of pallets.

Furthermore, the quality control and sortation of pallets into usable and defective pallets is optimized, as the human eye cannot scan the entire pallet as well as the system does.

The automated pallet quality inspection system from Körber fulfills the demand for:

- Fast, automatic sortation
- Repair of protruding nails
- Discard of defective pallets
- Highly improved ergonomics

“The pallet quality inspection system from Körber was recommended to us by Remiks (also from Tromsø) who had a similar one installed some years ago. And I must say that it has fulfilled our expectations 100%. It runs steadily and efficiently and is a great ergonomic win for our employees. The quality of the pallets is vital for the entire distribution to run smoothly. A weak, loaded pallet breaking somewhere down the distribution chain can cause a major setback.”

Johnny Johannessen

Distribution Manager, ASKO NORD AS

Facts and figures

Capacity

200 pallets/hour

Pallet types

EUR + NLP pallets (plastic)

Automatic repair

Protruding nails

Automatic inspection

- Top and bottom boards
- Blocks
- Tunnels
- Foil remains

