

Automated pallet inspection

Remiks: Taking the weight off employees.



The automated pallet sortation and quality control system has relieved the employees at Remiks of a major burden, and increased productivity by approximately 120 percent since implementation.

The customer

Remiks is a supplier of waste services to both private households and companies. The company is responsible for handling recyclable packaging and is a knowledge and innovation center in the district of Tromsø, Norway.

Technologically the requirement was to improve ergonomics by automating the heavy lifting of 20-25 kilogram pallets. An additional aim was to improve productivity by handling even more pallets with a sharper eye for quality in the sorting.

At a glance

Project goals

- Improved ergonomics
- Optimization of quality control

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 discharged pallets from approved pallets
- No manual handling of pallets



The solution

In the effort to automate the sorting of pallets, Körber Supply Chain delivered a stand-alone machine in 2014, with empty pallets automatically being conveyed into the pallet magazine. The mixed stacks of empty wooden and plastic pallets are loaded, fed and sorted for recycling to be reused in the food industry. The pallet magazine destacks the pallets one after another; they proceed down the roller conveyor and pass through a sewing press roller, pushing any protruding nails into the pallet.

After the nail press, the pallet is centered and conveyed through the pallet check station for a quality approval. Depending on the quality, the pallet is transported to a pallet magazine where it is stacked. When 16 pallets have been stacked in the magazine, the pallet stack is transported to the pickup position.

Benefits

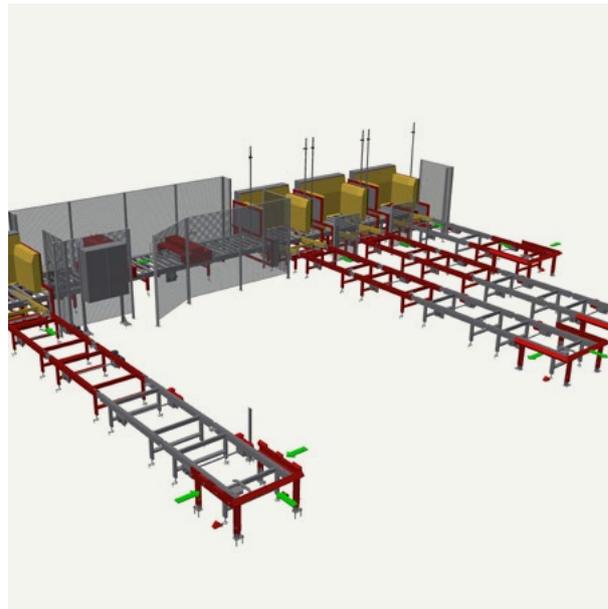
With the automation of pallet sorting, Remiks has saved one full-time job role. Now a single employee can carry out the task, whose job is to monitor the machine as it performs a careful, high-capacity and ergonomic handling of pallets.

“Manual sorting gave us a growing amount of challenges due to increased demands for efficiency, quality and ergonomics. In addition, it was difficult for the human eye to make quality checks on the pallets, and the inappropriate lifting of unmanageable and heavy pallets was a major burden for the employees.

The pallet sorting system has automated the process to such an extent that a single employee now ensures that the machine is maintained, and heavy lifting is avoided. We have increased productivity by approximately 120 percent since implementation.”

Roy Leding

Head of Department
Remiks, Tromsø



Facts and figures

Capacity

180 pallets/hour

Pallet types

EUR + NLP pallets (plastic)

