



CASE STUDY

Covidien/Kendall

CONVEYCO | Integrated
Solutions &
Software

OVERVIEW

Conveyco integrated an automated palletizing solution for Covidien (including several for their Kendall brand), improving space utilization, increasing production capacity, and enhancing safety on the manufacturing floor.



BACKGROUND

Covidien, a global leader in healthcare products, faced challenges in their palletizing process, which was space and labor-intensive. The existing system relied on carts, gravity conveyors, and manual labor to palletize finished goods, creating inefficiencies and safety concerns in the tight production floor environment. The company needed a solution that would streamline the process, reduce manual handling, and improve space utilization.



CHALLENGES

Conveyco worked with Covidien to develop an automated palletizing system, incorporating robotics and transfer cars to optimize production efficiency, reduce labor costs, and enhance safety.

Key Challenges

Kendall's previous system required large aisles for the cart-based method and was inefficient, with operators manually attaching and unhooking completed loads from a moving AGV train. The process occupied valuable space and involved a high level of manual labor, leading to potential safety hazards and operational inefficiencies. Additionally, the system failed to fully maximize trailer height, resulting in additional layers being added during shipping.

SOLUTION

Conveyco provided an automated robotic palletizing solution that reduced labor costs, improved safety, and maximized space utilization.

THE RIGHTFIT SOLUTION

Conveyco's solution automated Kendall's palletizing process, incorporating robotics, conveyors, and shuttle cars. The system maximized space utilization, improved safety, and increased throughput with minimal human intervention.

Key Features of the RightFit Solution:

- Vertical Continuous Lift & Overhead Conveyors:
 - Cartons are elevated to overhead conveyors, freeing up floor space.
 - Cartons accumulate and merge before a shoe sorter for efficient organization.
- Robotic Palletizing Cells:
 - Three robotic cells handle up to four different products, improving flexibility and throughput.
 - Laser barcode scanners sort cartons to the correct robot cell.
- Automated Shuttle Car System:
 - Shuttle cars deliver pallets and retrieve completed loads, enhancing safety.
 - Robots select two cartons at a time, speeding up pallet building.
- Automatic Stretch Wrapping System:
 - After palletizing, the stretch wrapper secures the load for storage or shipping.
- Maximized Trailer Height:
 - Robotic palletizing allows loads up to 110 inches high, optimizing trailer space.

Conveyco's automated palletizing solution transformed Kendall's production process by increasing efficiency, safety, and space utilization. This long-term solution reduced labor costs, enhanced throughput, and positioned Kendall for future growth.

RESULTS

The automated system delivered increased production capacity, reduced labor costs, and improved safety and space utilization.

The implementation of Conveyco's automated palletizing system resulted in significant improvements in efficiency, safety, and space utilization for Kendall. The system streamlined production, reduced manual labor, and optimized floor space.

Key Outcomes of the Solution:

- Increased Production Capacity:
 - The automated system allowed for continuous operation with minimal human intervention, increasing production capacity by reducing downtime and manual labor.
- Improved Space Utilization:
 - Vertical lifts, overhead conveyors, and robotic palletizing reduced the need for large aisles, freeing up space for more production lines without expanding the footprint.
- Enhanced Safety:
 - The new system reduced manual handling of moving loads, cutting the risk of injury and improving workplace safety by automating shuttle cars and robotic cells.
- Optimized Shipping Efficiency:
 - Robotic palletizing allowed for loads up to 110 inches high, maximizing trailer space and reducing the need for additional shipments, lowering transportation costs.
- ROI Maximization:
 - The automation system improved throughput and reduced labor costs, driving higher ROI by optimizing space, shipping, and production processes.

In conclusion, Conveyco's solution helped Kendall achieve higher efficiency, reduced costs, and improved safety, positioning the company for long-term growth.



KEY TAKEAWAYS

Conveyco's expertise and tailored automation solution provided Covidien/Kendall with a seamless transition to a more efficient, safer, and cost-effective palletizing process. By optimizing production and shipping, Conveyco was able to help achieve operational excellence and long-term growth potential.

FINAL INSIGHTS

- Automation can significantly improve safety by eliminating manual handling in hazardous environments.
- Proper space utilization is key to maximizing production capacity in tight manufacturing areas.
- Integrating robotics and automation with existing systems can reduce labor costs and improve throughput.
- Maximizing trailer height can optimize shipping processes and reduce the need for additional layers.

ABOUT US

At Conveyco, we are your trusted system integration partner, dedicated to designing and implementing innovative, efficient, and reliable solutions tailored to your unique needs. With almost 50 years of experience, we specialize in creating seamless, end-to-end systems that optimize performance and deliver measurable results. Unlike OEMs tied to their own equipment, we independently select from vetted partners and technologies to deliver solutions that exceed expectations.

Our in-house software expertise ensures seamless integration and performance tailored to your operation. From system design to implementation, our industry-leading controls provide efficiency, reliability, and scalability. Led by a team of seasoned industry veterans, we prioritize building long-term relationships and delivering on our promises with the integrity of a family-owned business. Free from outside investors, we make decisions with your best interests in mind, allowing us to provide solutions without compromise.

Supporting Your Goals

We understand the increasing demands for efficiency in today's supply chain. Our processes are designed to enhance productivity, optimize resources, and streamline operations, helping your business achieve its warehousing automation goals without compromising performance.

Let's Build Your Future, Together

When you choose Conveyco, you're not just gaining an integrator—you're gaining a partner committed to helping you achieve your goals. We redefine what's possible, together.

Contact Us

To learn more about how Conveyco can help transform your operations, visit www.conveyco.com or reach out to our team at conveyco@conveyco.com.