Full Integration

Parts ∙ Rental ∙ Service
Leasing ∙ Fleet Management

Customer: Global Leader in the Manufacture & Sales of Aluminum Rolled Products

Executive Summary

This Midwest Manufacturing Company engages KMH Systems, Inc. to help design automation into their production lines to increase productivity, optimize return on labor, improve safety, and ultimately reduce their cost per unit shipped.

Challenges

This customer engaged KMH Systems, Inc. to review their production line processes to help increase productivity to keep up with customer demand. The increased customer demand required new ideas for maximizing palletized, wrapped, and customer-ready product. With the help of KMH Systems, Inc., they elected to pursue some plant design improvements to resolve these issues.

“KMH Systems provided an entire team to discuss various design and equipment options within our budget to accommodate our required ROI. The automated system worked as intended with minimal downtime over an extended period of time.”

- Engineering & Maintenance Manager
Solution

- Robotic Integration
- End-of-Arm Tooling
- Carton & Pallet Conveyors
- Automatic Stretch Wrap Machine
- Pallet Dispenser
- Conveyor Controls & Design
- Panel Build
- All Conveyor Mounted Devices
- Installation Drawings & Support
- Design & Build, Debug, Teaching
- As-Built Documentation

The Result, Return on Investment and Future Plans

The integrated system included 3 zero-pressure accumulation and transportation conveyors that brought various sizes and weights of cartons from the automatic taper into the robot palletizing zone for automatic palletizing into varying layer configurations. The completed pallets automatically discharge into a take-away conveyor that includes an in-line stretch wrapper. An upstream automatic pallet dispenser replenishes vacated palletizing zones. KMH wrote the program to control all of this activity without human intervention.

**KEY SAVINGS POINT**

This fully integrated conveyor, robot palletizer, pallet dispensing, and stretch wrapping system helped end user to reallocate 6 full time people per shift to other value-added needs within the operation resulting in a payback period of less than 1 year.
CASE STUDY

Illinois, Indiana, Michigan, Ohio, Kentucky, Tennessee, Georgia