



## Vehicle Automation Reduces Pallet and Product Damage

### Features and Benefits

Vehicles come to a safe stop before contacting obstacles

Cost effective verses manual or other automated (conveyor) transport solutions

A flexible solution for the warehouse's changing production demands

No Down Time during Installation

**Industry Group:** Automatic Guided Vehicle Systems (AGVS)



*With the installation of AGVs, system payback is under two (2) years.*

A system of three (3) automatic guided vehicles (s) was installed to automatically handle pallets generated by four (4) robotic palletizing lines. Requests for pallet movement are generated by sensors mounted on each of the four palletizer outlet conveyors. After pickup by the AGVs, full pallets are delivered to an automated stretch wrapper.

In addition, the AGVs also provide automatic delivery of empty pallets and packaging material to the robotic palletizers. Sensors detect when a palletizer needs empty pallets or packaging materials and an AGV automatically delivers them.

Each palletizer has two empty pallet input conveyors to accommodate the three types of empty pallets used. Empty pallets are delivered by fork truck to AGV pickup locations. The empty pallets are then conveyed to an output position where they can be collected by the AGVs.

Each of the AGVs use laser guidance to maneuver through the facility. The customer has already introduced several changes to the vehicle guidepath and the flexibility of laser guidance has allowed these changes to be implemented quickly and easily.

The AGVs operate 24 hours per day making over 625 deliveries, 7 days per week. System operation is managed by a supervisory computer that coordinates the movement of materials between the AGVs and the conveyors.

As a result, this self-guided vehicle system has provided a safe, efficient material handling solution. The use of AGVs also eliminated the damage caused by material handling and increased the productivity of their work force.



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