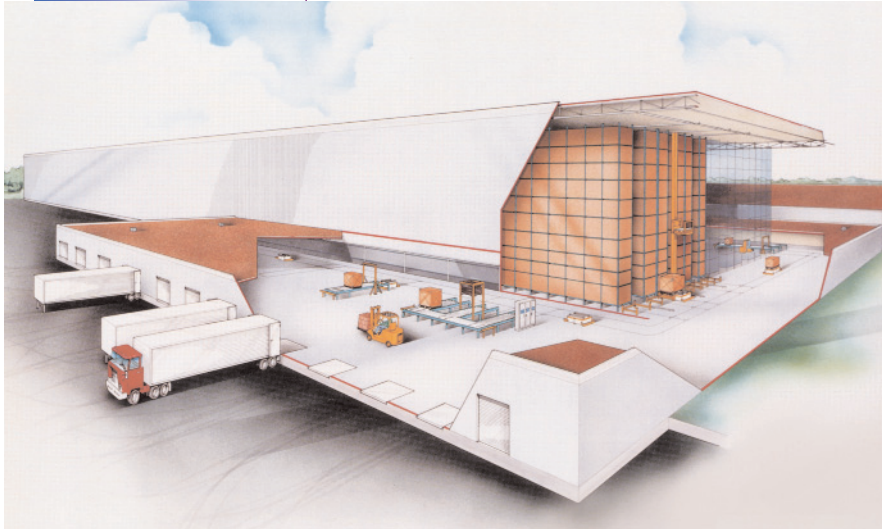


## 2-MINUTE OVERVIEW

# Automation for Polyester Film Producer Yields Their Most Advanced and Productive Plant



### Features/Benefits Include:

- Provided on-demand load prioritization
- Provided truck sequence loading
- Minimized manpower touchpoints
- Allowed for future 3-aisle expansion

An international producer of polyester films needed a new manufacturing facility to provide the benefits local sourcing would bring to their American market. The customer built a new facility, the largest of its kind in the United States, to manufacture high-grade film for package wrapping.

As plastic film rolls are manufactured, they are placed on shipping pallets, stretch-wrapped, and loaded onto captive pallets. An automated guided vehicle (AGV) picks up loaded captive pallets and delivers them to the automated storage and retrieval system (AS/RS), which stores them for later delivery to the shipping area.

As the system orders loads out of the AS/RS, the captive pallets are delivered by an AGV to the shipping conveyor. Next, fork truck drivers remove the shipping pallets and load them into waiting trucks. The empty captive pallets are then automatically accumulated and returned to the manufacturing area by AGVs.

The supplier designed, programmed, and installed all system controls, utilizing an equipment management system (EMS) for equipment and inventory management.

Additionally, the supplier provided AS/RS included 3 Unit Load storage and retrieval machines designed for 1-½ metric tons. The storage rack allows for a total of 3300 storage locations that handle 63" or 83" load heights.

The system includes 5 Lift Top AGVs from the supplier. They can handle captive pallets 60" wide by 71" long for a load weight of 1-½ metric tons.

The supplier provided a fully automated conveyor system that consists of 4 separate units with queues: Input Conveyor (7 queues), Empty Pallet Return Conveyor (2 queues), Partial Pallet Return (3 queues), Pallet Shipping Conveyor (8 queues) that includes an Empty Captive Pallet Collector System.

*Productivity was realized by minimizing manpower touchpoints.*



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