SYSTEM Logistics

HP HOOD

THE COMPANY

System Logistics passed the final text for full pallets handling at **HP Hood** plant in **Batavia (NY)**. The company, which manufactures and distributes dairy and non-dairy products throughout the United States, has chosen System Logistics as unique provider of the intralogistics solution, which is capable of managing a high quantity of flows at controlled temperature (+4°C).

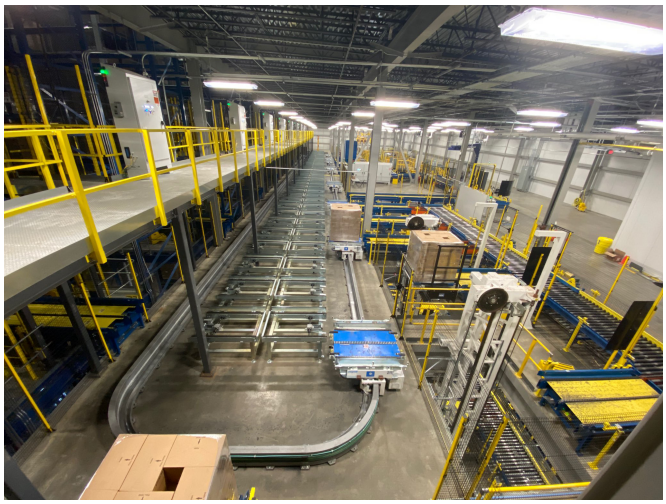
PROBLEMS AND OBJECTIVES

HP Hood has made a major investment to automate full pallet handling within the Batavia (NY) plant, where picking was only handled manually. This will become the only plant where package picking will also be handled automatically.
The purpose of introducing automation is to double the production capacity thanks to an intralogistics system capable of managing a high quantity of flows at controlled temperature (+4°C).

SOLUTIONS AND RESULTS

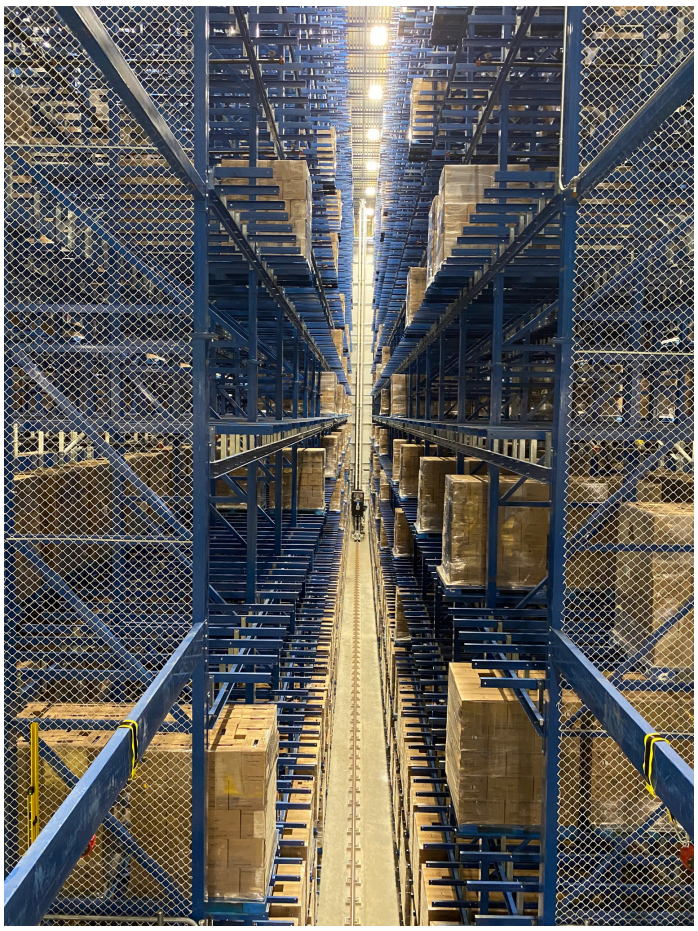
The solution, entirely designed and installed by System Logistics and the American subsidiary System Logistics Corporation, consists of an automatic internal warehouse served by **9 double-depth stacker cranes, over 30 metre in height**, for a total capacity of **24,192 pallet positions**, input and output handling, and **2 SVL loops** on two different floors. In addition, there is an automatic picking area, connected to the automatic warehouse on the second floor and consisting of a layer palletizing robot, a straight shuttle and a manual picking bay.
The warehouse stores the full pallets coming from the production plant and other production sites, together with the shipment units made in the picking area. The full incoming pallets are transported from the ground floor to the second floor by means of 2 single cranes. On the second floor, these are then handled by the SVL loop consisting of **11 shuttles** that assure a total hourly flow of about **295 pallets.**

The Shipment Unit pallets are created in the picking area, and can be either **GMA or CHEP type**. The Shipment Unit pallet can be made up in three different ways: layers only, layers and packages, or only packages.
If the Shipment Unit pallet consists of layers only, the mother pallet is transported from the warehouse to the automatic picking bay via the SVL loop on the second floor, and the layers required to complete the order areautomatically palletized by a robot, then wrapped and returned to the warehouse to be shipped.
If the Shipment Unit pallet consists of layers and packages, the shipment unit at the outfeed of the automatic picking bay is conveyed to the straight shuttle and transported to the manual bay, where the operator completes the pallet for shipment. The pallet is then wrapped and transported to the warehouse for shipment.
If the Shipment Unit pallet consists of packages only, the mother pallets are transported to the picking bay and the operator will complete the order pallet. An ergonomic electromechanical platform has been implemented in the manual picking bay to support the operator.
The full pallets and Shipment Unit pallets are transported to the **12 shipping bays** via the SVL loop located on the ground floor, consisting of **6 shuttles.**



HIGHLIGHTS

The material is handled by only **2 SVL shuttle loops**, that assure fast handling of high flows.
The Pallet Management **Software** has been **highly customised** as regards picking and full pallet handling. One of the special features provided is the possibility to change or cancel orders at any time, and at any plant level.
In addition, the system is capable of handling the preparation of a customer order in just 20 minutes.



TECHNICAL CHARACTERISTICS

9 stacker cranes H > 30 m
11+6 SVL shuttles
Production flows: 162 IN/OUT pallet warehouse
Robot Picking Pallet: 51 IN/ 37 OUT
Manual picking bay; 10/8
Picking robot+man (Shipment Unit): 29