

Automating to Improve Inventory Management and Customer Service

The Customer and Their Requirements

Stemilt Growers is a family-owned and operated business that grows and distributes a variety of fresh fruits, including apples, pears, cherries, peaches and nectarines. Stemilt has a legacy of innovation and sustainability within the farming industry. The company is known for providing outstanding service and a wide selection of products, including unique, trademarked apples such as Rave® and Piñata®.

Stemilt had rigorous requirements for an automation system. Pallets of fresh fruits can weigh up to 2,000 pounds, and not every automation system can handle that weight. In addition, different varieties of fruit needed to be stored at different temperatures to maintain freshness. The automation system needed to be able to support multiple temperature zones and ensure each product was stored in the right zone.

It was essential that the automation system integrate with Stemilt's ERP system to provide complete visibility into inventory inside and outside the automation system. The company wanted to be able to automate the movement of fruit from an adjacent packing facility into the new distribution center for palletizing and storage.



161 Enterprise Drive, Newport News, VA 23603
+1 757 887 8080
infona@swisslog.com
www.swisslog.com
<https://www.youtube.com/watch?v=vm5wzhvgdZ0>

“Before we implemented PowerStore we had forklift drivers continually bringing pallets of fruit to quality inspectors. Now inspectors can just push a button and the pallets are delivered to them automatically.”

- Ubaldo Guizar, Inventory Manager, Stemilt Growers



Growth & Impact



**150
Pallet/Hour
Throughput**

13,250 Pallet
Locations



**Increase in
Productivity**

Inspectors can now
inspect up to 40
pallets an hour.



**41% Reduction
in Warehouse
Labor Costs**

Re-allocate
personnel to other
parts of the business

Automating to Improve Inventory Management and Customer Service

Stemilt Growers

Significant Cost Savings and Productivity Improvements



The Solution

Swisslog's PowerStore is a high-density shuttle system for pallet warehousing. The simultaneous use of robotic storage and retrieval devices, along with lifts working independently across multiple vertical layers, allows PowerStore to support extremely high-density storage with exceptional throughput rates. Compared to manual storage, PowerStore can store 60 percent more pallets in the same space.

The modular PowerStore system for Stemilt is sized to hold more than 13,000 pallets across five levels with 25 row carriers and 25 aisle carriers. The PowerStore Supply Carrier ensures efficient and reliable inbound and outbound pallet delivery at high speeds. Three quality control stations were designed into the PowerStore system to eliminate the need for drivers to manually deliver pallets to quality inspectors.



The Results

- Following the move to the new automated distribution center, load times were cut to one-third of what they were previously.
- Quality inspectors also saw a huge increase in productivity using the automation system compared to having pallets delivered to them by forklift.
 - Inspectors at each of the three quality stations can now inspect up to 40 pallets an hour.
- The complex process of managing freshness across a range of different varieties of fruits has been simplified.
- The new automated distribution center has reduced stress on employees and managers by simplifying processes and normalizing work hours.
- Increased energy efficiency, which supports Stemilt's sustainability objectives. PowerStore is designed for efficient operation, and the modular design provides the flexibility to shut down modules when not needed.

“We have the storage we need now, and the system is meeting all of our expectations. But we also left space around the system so we can easily expand storage capacity in the future as we continue to grow.”

Gordy Schulze, Distribution Manager, Stemilt Growers