Silver State Liquor and Wine (Reno) had a growing problem. A year ago, its 3PL no longer had the capacity to manage the increasing volume flowing through its warehouses. Silver State, a division of the Wirtz Beverage Group (Chicago), took control of the situation through resuming control of its warehouse activity and consolidating operations into a new, 150,000 sq.-ft. facility that includes sales offices and a 121,000 sq.-ft. automated distribution center.

Since 2000, Reno’s population has grown about 21%, according to the U.S. Census Bureau. Similar population growth is happening in Las Vegas, home to Silver State’s sister company, Deluca Liquor and Wine and Coors of Las Vegas.

Even though Silver State and Deluca are legally separate companies, Kyle Bohan, director of warehouse operations, manages facilities for both companies—a challenging job. The volume flowing through the two distribution centers has grown rapidly. In both facilities Bohan has implemented a warehouse management system (WMS) from Manhattan Associates (Atlanta, www.manh.com) to manage and track product. The software lets Bohan monitor the activities at both facilities from his Las Vegas office.

On an average night, Silver State’s Reno DC delivers 2,500 cases and 4,000 loose bottles to approximately 300 customers. The Las Vegas DC has 700 customers. Each night, it distributes 28,000 cases—18,000 to 20,000 cases of beer and 10,000 to 12,000 cases of liquor.

Comparing liquor-to-liquor, Reno handles one-quarter to one-third of the volume of the Las Vegas facility. Each DC has its own delivery fleet.

Five years ago, Deluca kept up with the growth in Las Vegas by consolidating separate liquor and beer warehouses into a larger, automated DC. Silver State followed the same blueprint for the new DC that it opened in Reno on June 1, 2006.

Most of the product Silver State receives comes in on full pallets. The loads are counted and checked against
The three-level mezzanine has three pick modules. Each level has a conveyor that moves product to the sorter.

The purchase order and bill of lading. The product is then labeled, scanned and cutaway.

In its old facility, Silver State used a paper pick system. Today, it batch picks in waves to conveyors. Its system integrator, WorldSource (Batavia, Ill., www.world-source.com), installed conveyor and sortation system from Automation (Oak Lawn, Ill., www.automationconveyors.com). The system is controlled by software from Tech King (Cincinnati, www.techking.net). Hyster (Greenville, N.C., www.hysterusa.com) reach trucks, lift trucks, pallet jacks, and order pickers are used in the facility.

For every pick wave, there are three stops with each stop representing a customer. At each stop (pick location), workers pick for three customers. Scanners on the conveyor sort the cases for the different orders and divert them to the correct shipping lane.

"The productivity gains are through less picking and less walking in the pick modules," Bohan explains.

Receiving, replenishment and full-pallet picks are accomplished by scanning labels using a radio-frequency unit. Labels are generated from the allocation plan. The labels are sorted by wave and printed on a label printers from Zebra (Vernon Hills, Ill., www.zebra.com). A label room houses all of the printers. The labels are printed before shifts start then they are sorted, stacked in wave sequence and taken to the pick modules.

The Reno facility has five pick modules loaded with 5,000 SKUs. There are three pick modules in its three-level mezzanine. Each level has a conveyor that leads to the sorter. Another pick area holds loose bottles. Since its DC does not have room for 5,000 pick locations, it has a pick-out area for items that it does not have room to assign a pick face of their own. Conveyors take picked items to the sorter, which diverts them to the proper lane for delivery.

"We do a blind pick," Bohan says. "You have to assume you did the receiving and the replenishment correctly with this system, and that usually happens." Pickers know the number of cartons to pick at a location, but don’t know the product or the customer. They apply bar coded labels to the picked cartons. Scanners read the labels and divert cases to the correct shipping lane. The conveyor scanners also do pick and dock confirmations. "It takes all of the thinking out of it for the picker," he says.

Silver State picks orders in reverse stop sequence, meaning that orders for customers located last on the delivery route are picked first. Silver State can now load six trucks at the same time, instead of loading one truck at a time like it did in its old facility.

Silver State also now uses software to track volumes, trends, lead-time, transportation time, and on-hand and safety stock. The software recommends order volumes based on last year’s trends for the same time period, what is currently selling, inventory on-hand, safety stock and lead-time.

"It’s a pretty simple operation," Bohan explains. "We bring in finished goods and ship out finished goods. From the standpoint of distribution, it is a pretty clean system. That’s why we have the WMS to keep the inventory accurate."