

Storage systems made to manage space

Innovative warehouse solutions continue to make storage an easy process

STORAGE EQUIPMENT FOR WAREHOUSES IS ENGINEERED TO HANDLE THE number of SKUs that have entered warehouses in recent years. Manufacturers of warehouse storage systems have developed ways to use warehouse space more efficiently and continue to give customers a good return on investment.

As the number of SKUs entering and leaving a warehouse grows, changes to the storage system may need to be implemented, including case flow, push back or an automated storage and retrieval system (AS/RS). When a company wants to make some changes to its warehouse, the first step is to find out where the problems are occurring and what can be done to fix them, says John Chauncey, national strategic account manager at Elite Storage Solutions Inc., North Easton, Mass.

"The biggest challenge we see is the increasing number of SKUs that they have to deal with in the warehouse," says Alex Huitron, international strategic account manager at Elite Storage Solutions. "With the consumer demand of different bottle sizes, different flavors and the competition between bottlers, there are always increases in the number of SKUs that a particular warehouse has to deal with in the confined space they have."

In order to tackle storage problems, Elite offers a variety of racking systems such as push-back, drive-in and AS/RS systems. AS/RS systems are growing in popularity in beverage warehouses because the systems make handling the number of SKUs easier, Chauncey says.

"A company might be looking at consolidating a big pick operation in one warehouse, picking anywhere from 90 to 95 percent of the pallets, then sending them out to a local warehouse and then distributing it to their customers," he explains. "Some cases they may want to put in an AS/RS system to put them in one location because they are easier to store and pick."

Grand Rapids, Mich.-based Dematic Corp. agrees that AS/RS systems are the future of warehouse storage. By using an AS/RS system, companies can use space more efficiently, have a real-time accuracy of the inventory and also store individual cases instead of whole pallets, says Ken Ruehrdanz, distribution and warehousing industry manager at Dematic.

"Every warehouse is different," he says. "They have different throughput volumes, different labor rates, different situations with their real



Westfalia Technologies Inc. offers *Savanna.NET* Warehouse Management Software (WMS), which enables companies of all sizes to select only the modules they need to handle for their warehousing and order processing needs.

estate and their land. Therefore the solutions are different."

Recently, customers have been asking for mixed pallet loads in order to provide consumers more choice, instead of an entire pallet of one product, Ruehrdanz says. While the stores receive smaller shipments of one product, it is up to warehouses to store all the products. Dematic offers an AS/RS system that gives the operator real-time control of inventory and decreases the damages to racks, the facility and products, Ruehrdanz says. The system also has the ability to build mixed pallet loads and retrieve an accurate order for the company.

"Having the software to maintain the real-time inventory of all the SKUs and then retrieve them in a sequence that's appropriate for the order that's being built is a big deal right now," he says. "... If it's going to a store, it needs to be ordered to match the planogram of the store. If it's going to another company's distribution center, the loads need to be configured in a way that's easy to pick when they get the load. Sequencing and preparing the order so it's optimally layered is a big trend we see."



Pallets of beverage products are staged in Dematic's automated storage and retrieval system (AS/RS). Pallets are retrieved when required to fill customer orders.

SOFTWARE SOLUTIONS

Westfalia Technologies Inc., York, Pa., produces equipment and software to maximize storage and optimize product flow, says Laura Worker, marketing manager. A key concern of beverage distributors is meeting the complex needs of customer's orders at high throughput rates, she says.

"Beverage companies are trying to build each pallet to fit each customer's specific order," Worker says. "Sometimes that means multiple products on the same pallet. While a full pallet order is easy to handle, a rainbow pallet of mixed items is more difficult to build, and mixed layer pallets are even more complex."

Westfalia manufactures automated and conventional material handling equipment including high density AS/RS, conveying systems, pallet flow systems, case picking systems, and case handling systems to help fix warehouse storage problems. Westfalia's AS/RS system can store up to 12 pallets in a single storage lane. The system works best for products with very high turnover rates and facilities with a lower number of SKUs, Worker says.

In addition, the company offers Savanna.NET Warehouse Management Software, which enables companies of all sizes to select only the modules they need to handle for their warehousing and order processing needs, Worker says.

"With its Microsoft.NET framework, Savanna integrates easily with various [enterprise resource planning] systems, Web interfaces and PLC systems," she says. "It can even flip from running on either SQL Server or Oracle database platforms with the flip of a switch."

WAREHOUSE AUTOMATION

For fully automated and semi-automated warehouse picking, Vertique, Arden, N.C., offers the Vertique Automated Case Picking System, which can build mixed pallet loads for delivery. The company depalletizes and mixes products on outbound pallets for going on side load or rear load delivery trucks.

Beverage manufacturers want to invest in a warehouse storage solution that is reliable and produces a justifiable return on investment, says Jeff Stingel, vice president of sales at Vertique. Vertique's Automated Case Picking System provides automated



Elite Storage Solutions Inc. offers a variety of racking systems such as a structural drive-in racking system shown here.

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