



Automated Storage and Retrieval System Increases Accuracy and Efficiency

Features and Benefits

Automated storage reduced touches from 12 to 2.

Improved inventory accuracy.

Industry Group: Automated Storage/Retrieval Systems (ASRS)



The AS/RS delivers totes to workstations where operators do order selecting in an ergonomic and efficient environment for 275 stores and 13 regional distribution centers around the country.

A goods-to-the-person picking system powered by a mini-load automated storage and retrieval system (AS/RS) with 12 fast, double-handling cranes and 126,000 tote locations. The AS/RS delivers totes to workstations where operators do order selecting in an ergonomic and efficient environment for 275 stores and 13 regional distribution centers around the country for one of the nation's largest distributors of industrial fasteners.

The 530,000 square foot Distribution Center stocks 163,000 SKUs. Combined with a 13-crane unit load AS/RS with 52,000 pallet locations, the system processes 16,000 packages per day while picking from as many as 100,000 unique SKUs each month.

How it works: The AS/RS handles medium to medium-fast moving SKUs in a same-day order processing format. The mini-load AS/RS retrieves totes from storage based on the departure times of the trucks. The totes are conveyed and sorted to an operator at a workstation who scans the tote to verify the product. A screen displays the part number, a quality control number and the quantity to be picked. Once all the items for an order have been picked, the tote is returned to a storage location in the mini-load. The shipping container is closed, placed on the conveyor system and sorted to the

pallet build area.

In the shipping area, cartons are either loaded directly into a truck for parcel shipment, or scanned and palletized onto a mixed SKU composite pallet and queued for a later delivery.

The benefits: Through the use of mini-load technology, the company has reduced the number of times it touches a product in the DC from as many as 12 to as few as two, with almost all of the handling now done via automation. The AS/RS improved inventory accuracy and eliminated errors by eliminating product touches, the company has reduced the opportunity for errors.



TGW Systems

6870 Grand Haven Road
Spring Lake, MI 49456
231-798-4547

usinfo@tqw-group.com

www.tqw-group.com