DEMATIC

CASE STUDY

Associated Grocers of New England Meets Growth Targets

Wholesale Grocery Distributor Manages More Capacity in Less Space





Pembroke, New Hampshire, USA

Associated Grocers of New England (AGNE) operates the largest retailer-owned, wholesale grocery distribution center in New England. The grocery distributor serves the needs of independent retail grocers of every store size and format: multi-store independent supermarket groups, community supermarkets, country stores, and convenience retailers.

OPERATIONAL VISION

AGNE needed to add a significant number of new SKUs, but their existing distribution center did not have enough storage and order picking capacity to accommodate the new categories of SKUs. To efficiently increase capacity, AGNE implemented a Dematic goods-to-person order fulfilment system with Dematic Multishuttle® automated inventory storage.

This system allows Associated Grocers of New England to vastly increase its SKU count — particularly for slower moving specialty, natural, and organic items —in an extremely compact floorspace. The Multishuttle has a footprint of less than 5,000 square-feet. It provides over 10,000 pick facings, which is equivalent to approximately 60,000 square-feet of traditional warehouse space.

According to Greg Fontaine, Senior Director of Warehouse Operations with AGNE, "The Dematic goods-to-person order fulfillment system is tremendous technology and a great fit. The full automation and space efficiency have allowed us to support item growth and offer our customers a vastly expanded selection of food products."

DESCRIPTION OF OPERATION

Inbound pallet loads are received and staged at the **Decanting Workstation**. Operators scan barcodes on SKU cases and empty inventory totes. Dematic software provides step-by-step instructions for operators to transfer inventory into the totes.

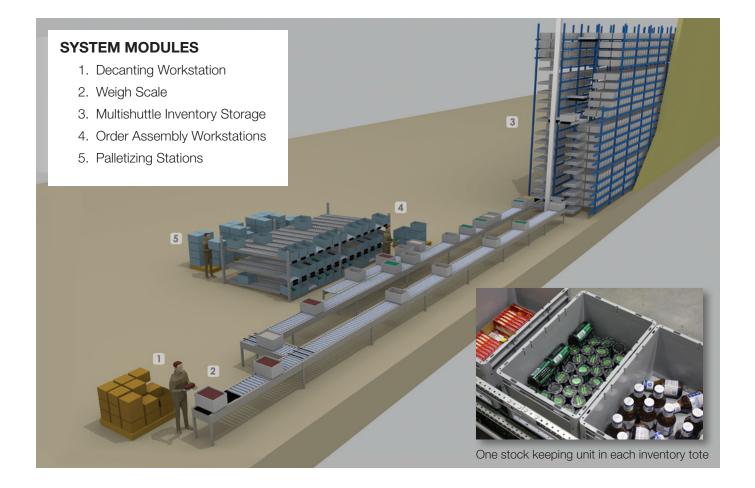
Dematic software monitors the expected tote weight. When totes are complete, operators push the tote to inbound conveyor. As totes moves toward storage, they pass over an inline **Weigh Scale** that checks the weight, and the Dematic software validates it.

Dematic software determines storage locations for the inventory totes within the **Multishuttle Inventory Storage** and directs the totes to those locations. Totes are stored in the Multishuttle rack structure until required for order assembly.

When Dematic software receives orders from the host system, it determines the best inventory for allocation. It uses the dispatch date, time of the order, FIFO date, and other data to optimize the quantity picked from each tote and minimize picking times. The Multilshuttle retrieves the inventory totes, and Dematic software directs them via conveyor to **Order Assembly Workstations**. At these putwall workstations, operators scan barcodes on the donor inventory (donor)totes. Dematic software activates lights on the flow rack structure, indicating the "put-to-tote" location and quantity.

Operators put the appropriate quantity of items into the order totes. If the inventory in the tote falls below a configured threshold, Dematic software instructs operators to use the lights to count the remaining inventory. This continuous cycle counting ensures inventory accuracy. Dematic software carefully manages the quantity of loads to provide each operator with a constant stream of work.

When an order is complete, a lighted slot display at the order tote position in the flow rack structure. The operator pushes the tote to the outbound position on the gravity flow rack structure. On the backside of the flow rack structure are **Palletizing Stations** where operators remove the completed outbound order totes and stack them on pallets. Pallets are then moved to an outbound shipping door.





At the decanting workstation, each stock keeping unit is unpacked and transferred to an inventory tote.



Each inbound inventory tote passes over an in-line weigh scale to confirm and verify stock keeping unit count.



The inventory totes are stored in the Multishuttle.





At the order assembly workstations, light-directed technology indicates the totes for operators to "put" the items. The slot display shows the quantities.



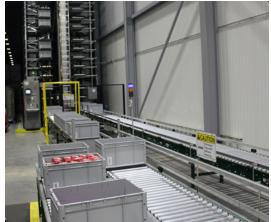
Right angle transfer diverts inventory tote into order assembly workstation.



After items have been "put," the donor inventory tote is pushed back onto outbound conveyor.



Completed order totes accumulate on flow rack structure. Operator scans each tote and is directed to appropriate pallet load.



The conveyor network connects the workstations with the Multishuttle.

KEY ATTRIBUTES

- Optimized pick quantities and inventory allocation for efficiency
- Continuous cycle counting for inventory accuracy
- Compact system footprint
- High density, controlled access inventory storage
- High-rate flow in/out of Multishuttle storage subsystem with double-deep storage
- Ergonomic workstations
- High performance, light-directed order assembly
- Scan verification, weight check maximize accuracy
- Operational flexibility for changing activity profiles
- Scalable & expandable for future changes, growth, and acquisitions

DEMATIC SOFTWARE

The system is managed and directed by Dematic Warehouse Execution System (WES) software. It is a scalable logistics software platform for order fulfillment and automated storage:

- Real-time performance visibility and control
- Scalable design allows growth and change
- Enables high order and inventory accuracy
- Facilitates labor productivity and processing speed
- Host Integration

THE RESULTS

The AGNE distribution center picks more grocery store replenishment orders while using less warehouse space, time, and operating staff.

Power the Future of Commerce.

DEMATIC

- If you are interested in learning more about this topic and how we can help, please contact us.
 - Dematic.com