



## Robotic Order Fulfillment

### Robotic Order Fulfillment for Beverage Distribution

#### Level 4 Certified Servicing FANUC Integrator

We provide innovative robotic solutions from concept to installation and 24/7 service and support for complete customer confidence.



Robotic order fulfillment for Beverage Distribution facilities has arrived. With an array of solutions built around FANUC robots and their legendary uptime and reliability, Motion Controls Robotics can provide a turnkey robotic order fulfillment solution for beverage distribution operations. In these robotic work cells, retail and warehouse orders requiring mixed pallet loads are quickly, reliably assembled by one or more robots.

 Watch  
Simulation Video

\*Click on image to watch video



*" MCRI was the perfect fit for our major expansion. They provide first class service with the highest integrity. Their staff is very personable and was very successful in leading the engineering, procurement, and implementation phases of our material handling system needs."*

~Project Manager  
International Paper

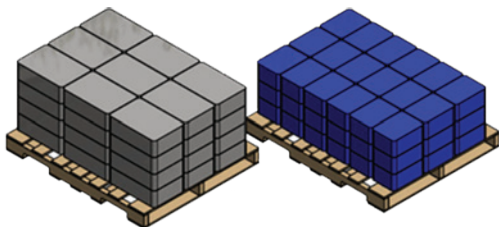
### Product Full Layer Specs

#### Base throughput (layer picks per minute)

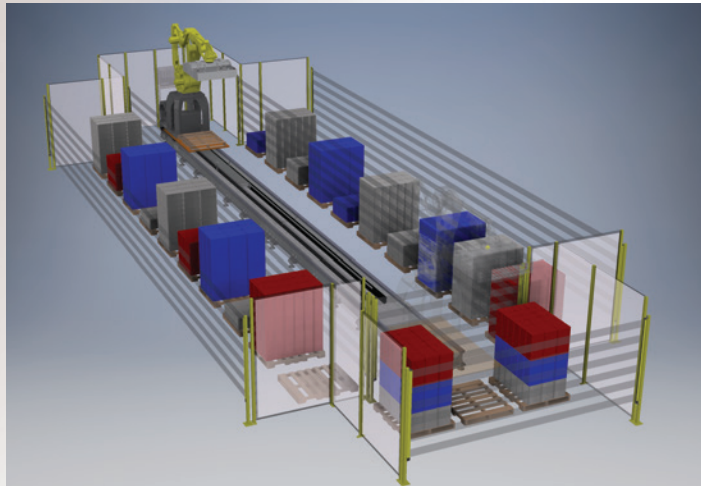
- Up to 8 layers per minute

#### Min/Max layer size

- GMA and CHEP Pallet Specifications
- Source and Order pallet can be any height
- In this system, each layer weighs 73 kg (162 lbs)



12 & 24 packs of 12 oz cans shown, other case and package sizes can be handled in same system



### System Description

The MCRI supplied robot cell control software directs the robot to pick full layers from the appropriate SKU donor pallet. The robot picks a variety of 6, 12, 18 and 24 packs of 12 or 24 ounce cans or alternately packaged beverage products from source pallets to build the order pallets. The robot and pallet travel up and down a rail selecting full layers of the correct SKUs needed to build the mixed load pallet. The robot places full layers on the active order pallet. The software keeps track of case count as single, multiple, or partial pallet orders are completed.

#### Available Options - Options with and without infeed conveyor

**Option 1** – Robot moves empty pallets from empty pallet rack to order stations, operator delivers donor pallets to robot pick stations and removes finished order pallets.

**Option 2** – Fork truck operator replenishes empty pallets at order stations, delivers donor pallets to robot pick stations and removes finished order pallets.

**Option 3** – Fully automated pallet delivery and take-away system using a pallet conveyor network, SmartCart Automatic Guided Cart, or automatic guided vehicle system.

Beverage Distribution



# Full Layer Mixed SKU Palletizing System

## System Robot

This beverage distribution - order fulfillment palletizing system is designed around a **FANUC M-410iB / 450** robot. This robot simplifies end of arm tool integration for precise, high-speed operation.

FANUC America offers a variety of robots for robotic order fulfillment applications. These robots all have software and vision options available to increase flexibility and fine tune the process.

### FANUC Robot M-410iB / 450

payload  
up to 450 kg  
(992 lbs)

reach  
3.13 M  
(9 ft)

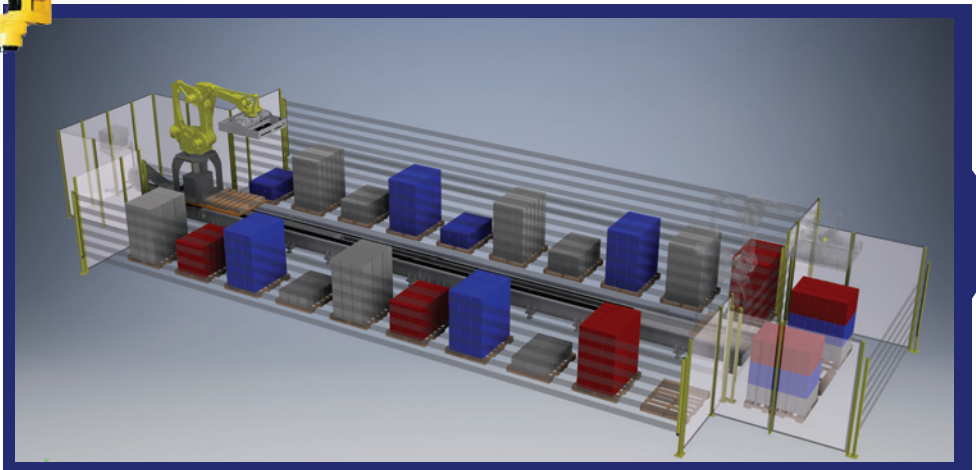


Designing the system by looking at future needs, helps to make your robots reusable and re-deployable if there are changes.

## Robotic Order Fulfillment - Beverage Distribution

### System Description

- Robot - FANUC has a variety of palletizing robots rated for different payload needs
- Rail length and number of donor pallet positions – the length of this system allows for 20 pallets
- End of arm tool – higher product variability
- Order pallet location – the order pallet can be in fixed location, can travel along a continuous conveyor between the robot rail and the donor pallets, or can ride with the robot on the rail transfer unit (RTU)
- SKU count
- Number and type (static or conveyor) of pallet order stands – there are two outfeed pallet conveyors shown



\* Customer orders can be manually entered into the robot cell controller or directly downloaded from your Distribution order computer to the robot cell controller.

*Keeping Manufacturers Competitive with Quality Robotic Solutions*

Beverage Distribution