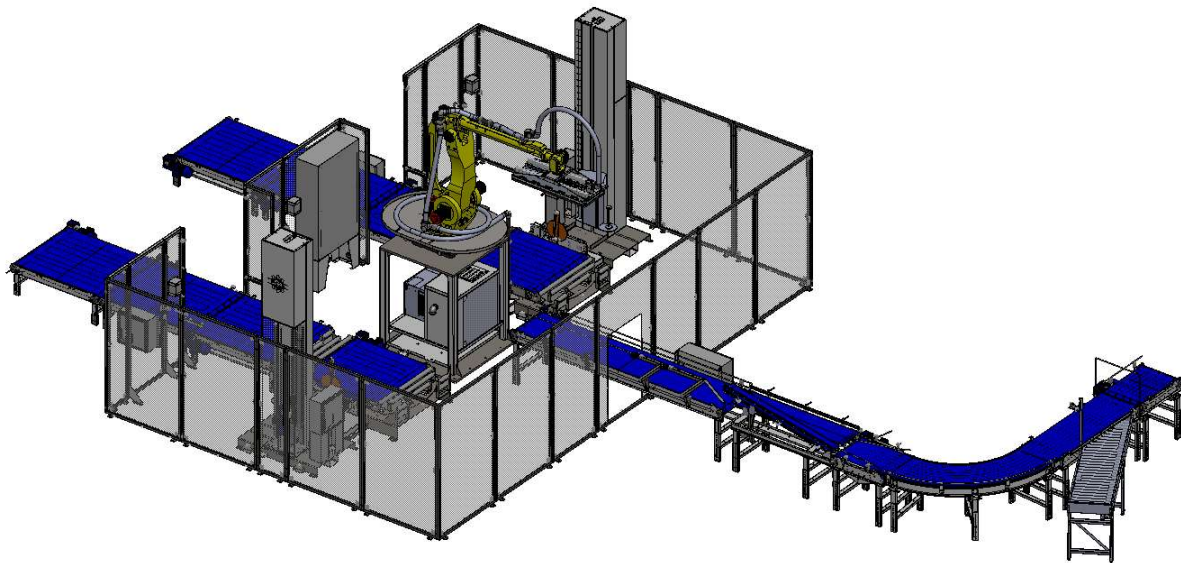




PROCESS CONTROL AUTOMATION

Configurable Palletizer

Call for configuration quote



Overview

The PCA Configurable Robotic Palletizing Cell is a flexible automation platform designed around each customer's product, production rate, available floor space, and downstream requirements. The cell can be configured with one or multiple product infeeds, pallet build stations, robot models, and pallet-handling options. This preliminary specification sheet provides a scalable baseline for applications ranging from a dedicated single-line palletizer to a centralized multi-line palletizing system.



PROCESS CONTROL AUTOMATION

Key Features

- Recipe-driven pallet pattern management with fast SKU changeover
- Allen-Bradley PLC and HMI control package
- Application-specific FANUC robot selected for payload, reach, and cycle requirements
- Vacuum, clamp, fork, bag, layer, or combination end-of-arm tooling
- Fully guarded design with safety-rated controls and monitored access points
- Remote access capability for diagnostics and PCA support
- Turnkey engineering, fabrication, programming, installation, startup, and training

Available Configurations

- Dedicated single-line palletizing cell
- Dual-station cell for continuous pallet changeover
- Dual-infeed or multi-line palletizing cell
- Centralized palletizing system serving multiple production lines
- Floor-level pallet handling or automatic pallet conveyor system
- Integrated stretch wrapping, labeling, slip sheets, tier sheets, and pallet dispensing

Configurable Specifications

Production Speed	Up to 12 cycles/minute with a max of 10 products per cycle*
Product Types	Cases, trays, totes, bundles, bags, pails, and custom products
Product Weight Range	Up to 100 lbs.; higher payloads available*
Infeed Configuration	Single, dual or multiple infeeds
Pallet Size Range	40 x 48 in standard; configurable
Stack Height	Up to 108 in typical*
End Effector	Vacuum, clamp, fork, or combination tooling
Control Platform	Allen-Bradley PLC with HMI
Robot	FANUC industrial robot; model selected by application
Power Requirements	480VAC / 3PH / 60Hz; final load by configuration
Air Requirement	Typically 5 CFM @ 80 PSI; tooling dependent
Safety Design	Guarding, interlocks, scanners and light curtains
Warranty	1-Year Limited Warranty

** Preliminary values shown for budgetary / conceiving purposes. Final specifications depend on product size, rate, pallet pattern, end effector selection, and plant requirements.*



PROCESS CONTROL AUTOMATION

Safety & Compliance

- Designed in accordance with applicable ANSI/RIA and OSHA safety standards
- Integrated emergency stop circuits with system status indication
- Safety-rated control system with monitored circuits
- Perimeter guarding with area scanners and pallet zone protection
- Lockout/Tagout (LOTO) provisions for safe maintenance access

Optional Equipment

- Automatic pallet dispensers and pallet conveyor systems
- Integrated rotary-arm, turntable, or ring-style stretch wrappers
- Slip-sheet and tier-sheet magazines with robotic placement
- Label applicators, barcode readers, and pallet identification systems
- Case orientation, turning, upending, and product accumulation conveyors

System Layout & Dimensions

Final system dimensions vary based on the number of infeeds, pallet positions, robot selection, product presentation, pallet-handling method, optional equipment, and plant safety requirements. PCA provides a project-specific general arrangement drawing for customer review and approval.

Single-Line Cell

One product infeed with one or two pallet positions.

Dual-Station Cell

Two pallet positions allow pallet removal while production continues.

Multi-Line Cell

Multiple production lines routed to one robotic palletizing system.

Automated Pallet Handling

Pallet dispensers, conveyors, wrappers, and finished-pallet discharge.