AutoStore™ CarouselAI™

AI-Powered Automated Robotic Picking

A plug 'n' play solution for your AutoStore. Ideal for efficient, low-cost fulfillment, with high-demand.

The demands for speed, efficiency, and adaptability are at an all-time high in e-commerce fulfillment. And with ever-growing SKU complexity and customer expectations, it's not a challenge simply solved by additional manual labor resources. Alongside volatile labor markets around the world, manual labor provides a fast-diminishing cost-benefit ratio as headcount increases within a given space.

CarouselAI™ is an AI-powered workstation solution enabling fully autonomous picking capabilities. It offers best-in-class SKU coverage for efficient, accurate fulfillment for a huge range of product types. It empowers warehouse leaders to meet these operational challenges head-on, with the latest in AI-powered robotics technology in an easy to scale, cost-effective solution.

Accelerate your fulfillment with CarouselAI for fully autonomous picking.

CarouselAI is quick and easy to deploy, with no manual SKU data input or training required. It leverages the latest in advanced robotics hardware together with AI-powered self-learning, adapting to changing SKU and order demands without human intervention.
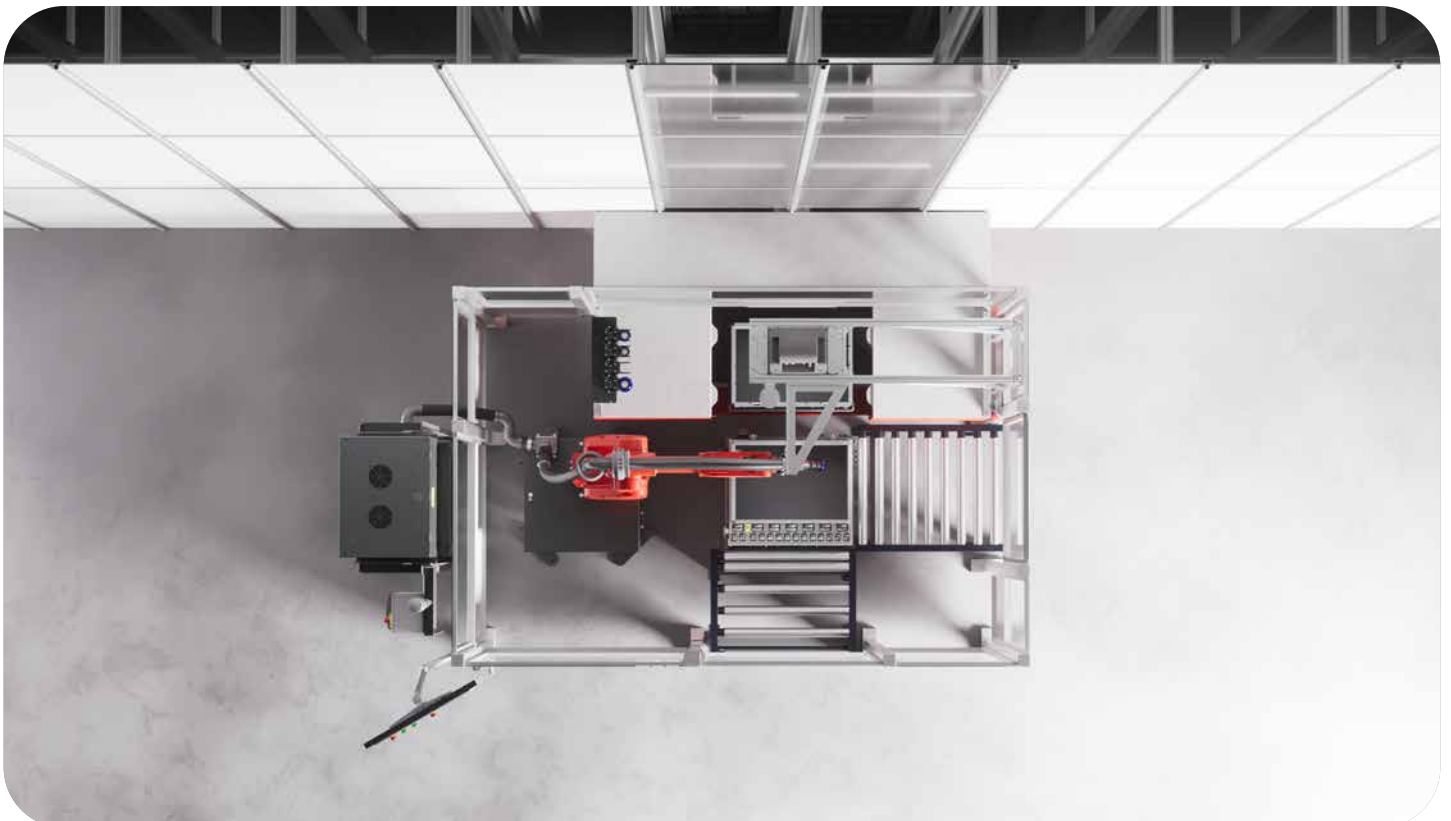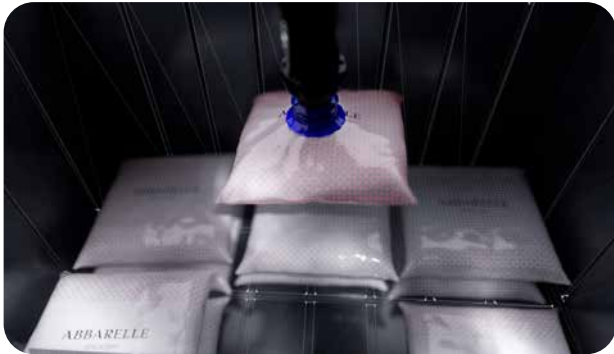
It combines our popular CarouselPort™ component, a fully integrated robot picking arm, and intelligent vision technology to optimize SKU handling in real-time. This ensures consistent picking speed and accuracy, even with regular changes to inventory selection and order profiles.

AutoStore

Automated robotic picking, purpose-built for AutoStore*:

CarouselAI is the only native automated robotic picking solution for AutoStore. It offers plug 'n' play functionality, without a complex technical setup or any third-party integration required.

- **Best-in-class SKU coverage:** Designed for efficient picking for huge variety of product types and packaging.

- **High-precision, peak performance:** Pick up to 650 items/hr. with 99.5% pick accuracy.

- **Advanced self-learning streamlines operations:** Adapts to new SKUs and product types without human intervention or training. Optimize handling for shape, weight, texture, etc. in real-time to maintain efficiency as you scale and grow.

- **+16 hours performance:** Uninterrupted operations of 16 hours and even more.

- **Low-cost way to extend operations:** Expand picking operations & capacity without additional shift & manual labor.

*Please note: CarouselAI is not available for order in the APAC region.

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Key Benefits:

AutoStore solutions offer a typical ROI period of 1.5 – 2 years. CarouselAI offers high flexibility and scalability, helping to maximize productivity of your current operations, while enhancing long-term cost efficiencies and reducing labor dependency.

It can efficiently handle +90% of typical e-commerce SKUs and broad range of packaging types. CarouselAI can ehnace your customer experience by freeing up your team to spend more time on higher-value-add tasks such as quality assurance or returns management.

Standardized solution with simplified support & maintenance

Modular design speeds ensures rapid deployment and reduced technical complexity with no additional third-party configuration or compatibility requirements. No extra vendors to manage as service & support included as part of your overall AutoStore system management.

Consistent performance & 99.5% pick accuracy

No shift changes or fatigue, with highly predictability; stable performance with no drop in quality, even at peak. Virtually eliminates picking and handling errors.

Optimized efficiency & reduced costs

Extend operations without adding headcount or additional shifts for workers; reduce cost per pick for peak demand.

Scales as you grow with advanced-self learning

Automatically adapts to changing operational needs as you grow. Uses powerful machine learning to optimize picking efficiency in real-time for new SKUs and product types.

Ideal for e-commerce & regular SKU turnover

effortlessly adapts in real-time to changing SKU profiles, and different packaging, uneven textures, weights, etc.

Easy management with no training

Out of the box solution minimizes human intervention. AI capabilities adapt to new inventory with no manual inputs or system training.

Upgrade existing CarouselPorts

Original CarouselPort 4.0s can easily be upgraded to CarouselAI with minimal disruption to operations.

Features & capabilities

Single order & batch picking

High speed performance ideal for high-throughput and e-commerce fulfillment and store replenishment.

Best-in-class SKU coverage

Safely handles +90% of typical piece-picking SKU profiles, including irregular or bulky items.

AI-optimized patented gripper technology

Multi-functional SpectrumGripper®, with optimal grip detection. Fuses real-time sensor data with advanced AI models to continually optimize to provide safe, error-free handling for diverse SKUs and packaging, different weights, textures, packaging, etc.

Intelligent vision

The Primary Perception Module provides an overhead view of the AutoStore Bin, analyzing visual data to identify items in cluttered presentations. It determines the optimal grasp points and ensures accurate item selection for picking.

Open APIs

Easy connectivity with your WMS and other key systems for improved performance and accuracy.

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