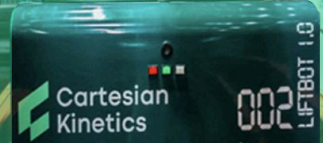


Mezzanine-Ready Warehouse Automation

How Cartesian Kinetics enables automation in elevated and space-constrained warehouse environments



The Mezzanine Automation Challenge

Warehouse mezzanines are designed to extend usable space, yet they often become operational dead zones when legacy equipment or structural limits block access. Obsolete crane systems, narrow aisles, and vertical layouts make many of these areas incompatible with traditional automation.

Replacing infrastructure typically requires major construction and downtime, leaving valuable vertical storage underutilized and operations dependent on manual labor.

The Carte+ Solution by Cartesian Kinetics

Omni Rack Robotics designed to operate within existing mezzanine structures



Uses Existing Racking

Integrates directly with mezzanine racking without requiring rack replacement.



Built for Vertical Mezzanine Environments

Operates efficiently in high-ceiling mezzanines with vertical storage layouts.



Lightweight and Distributed Automation

Keeps robots and storage loads within mezzanine load limits.



Low-Touch Integration

Connects to existing WMS workflows using no-code or low-code setup.



Fast Deployment

Deploys in weeks rather than months.



Minimally Disruptive

Designed to go live without interrupting daily mezzanine operations.

Case Study Performance

Deployed in an active mezzanine fulfillment environment spanning four mezzanine levels, with automation introduced directly into existing warehouse space and no rack replacement or extended operational downtime.

2,100

SKUs supported

4,410 sq ft

System footprint

1-2

Operators per shift

16

Robots deployed

1,100 units/hr

Throughput

~1.5 years

ROI achieved

Why It Matters

Mezzanines are built to make the most of limited space, but their value is often constrained by manual workflows and access challenges. Omni Rack Robotics helps facilities turn compact mezzanine areas into productive fulfillment zones without expanding the footprint.

Cartesian Kinetics enables teams to maximize existing mezzanine space, improve throughput with minimal labor, and avoid the cost and disruption of rebuilding or relocating operations.

Ready to Automate Your Mezzanine?

See how Carte+ brings high-throughput automation to elevated warehouse environments.

[Evaluate Mezzanine Automation](#)