

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:45 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 34
Average Utilization: 70.9%
Throughput Increase: 34.2%
Labor Cost Reduction: 28.5%
ROI Period: 2.3 years

Warehouse Performance

Warehouse Location		Capacity Used	Inbound/Day	Outbound/Day	Picking Accuracy	Automation Level	Status
Distribution Center A	Chicago, IL	74.7%	2,882	3,210	95.1%	66.6%	Improvement Needed
Distribution Center B	Dallas, TX	68.7%	2,982	2,319	96.6%	67.0%	Improvement Needed
Distribution Center C	Atlanta, GA	84.4%	2,957	3,596	98.3%	66.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	56.0%	1,680	1,532	96.1%	73.0%	Improvement Needed
Distribution Center E	Newark, NJ	36.8%	2,717	3,974	99.1%	81.0%	Optimized

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%

- Implement voice-picking system to improve accuracy to 99.8%

- Upgrade WMS integration for real-time inventory visibility

- Add automated sortation system for small package handling

- Implement predictive analytics for demand-based staffing

- Consider AS/RS system for high-velocity SKUs