

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:23 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 51
Average Utilization: 72.2%
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	51.6%	1,626	3,215	95.5%	78.2%	Improvement Needed
Distribution Center B	Dallas, TX	55.9%	2,926	3,616	97.2%	78.5%	Improvement Needed
Distribution Center C	Atlanta, GA	94.7%	1,366	2,977	96.7%	66.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	62.4%	2,392	1,608	99.1%	67.1%	Improvement Needed
Distribution Center E	Newark, NJ	49.0%	1,155	3,791	97.5%	70.5%	Improvement Needed

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