

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:08:58 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 51
Average Utilization: 68.7%
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	107.4%	1,582	1,837	97.7%	62.2%	Improvement Needed
Distribution Center B	Dallas, TX	69.0%	2,030	1,980	97.7%	66.2%	Improvement Needed
Distribution Center C	Atlanta, GA	74.0%	2,442	2,271	98.0%	76.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	37.7%	2,659	3,456	99.1%	62.6%	Improvement Needed
Distribution Center E	Newark, NJ	41.2%	1,448	2,550	95.4%	75.8%	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