

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:36 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 52
Average Utilization: 70.6%
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	96.3%	2,119	2,876	96.0%	78.3%	Improvement Needed
Distribution Center B	Dallas, TX	61.1%	1,860	2,667	97.6%	66.4%	Improvement Needed
Distribution Center C	Atlanta, GA	40.3%	2,319	1,753	96.7%	69.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	31.0%	1,024	2,345	96.8%	73.5%	Improvement Needed
Distribution Center E	Newark, NJ	91.0%	2,168	1,686	95.5%	65.9%	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