

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:43 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36
Average Utilization: 73.0%
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	92.0%	2,378	1,733	97.5%	66.4%	Improvement Needed
Distribution Center B	Dallas, TX	58.2%	1,533	2,796	95.1%	67.1%	Improvement Needed
Distribution Center C	Atlanta, GA	68.8%	2,991	3,679	99.1%	64.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	54.1%	1,807	2,451	97.4%	90.9%	Optimized
Distribution Center E	Newark, NJ	48.3%	2,998	2,713	98.2%	76.4%	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