

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:37 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 57
Average Utilization: 76.1%
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	69.5%	2,939	3,083	98.2%	86.1%	Optimized
	Dallas, TX	76.6%	2,359	2,328	99.1%	69.3%	Improvement Needed
Distribution Center B	Atlanta, GA	79.5%	2,653	3,039	96.7%	76.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	57.6%	2,625	3,195	99.4%	74.4%	Improvement Needed
Distribution Center E	Newark, NJ	94.3%	1,211	3,584	98.8%	74.0%	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