

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:02 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 47
Average Utilization: 73.3%
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	63.8%	2,271	1,935	95.3%	69.1%	Improvement Needed
Distribution Center B	Dallas, TX	64.6%	1,796	2,633	99.4%	71.9%	Improvement Needed
Distribution Center C	Atlanta, GA	99.2%	2,427	3,167	98.5%	75.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	90.4%	1,596	1,840	97.2%	65.9%	Improvement Needed
Distribution Center E	Newark, NJ	51.2%	1,910	3,376	97.0%	84.2%	Optimized

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