

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:28 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 47
Average Utilization: 79.2%
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	99.3%	2,929	1,531	97.4%	68.1%	Improvement Needed
Distribution Center B	Dallas, TX	98.3%	1,329	3,059	98.5%	88.6%	Optimized
Distribution Center C	Atlanta, GA	55.8%	1,018	2,885	96.9%	63.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	85.4%	1,853	2,733	95.2%	93.5%	Optimized
Distribution Center E	Newark, NJ	82.3%	2,986	3,316	99.3%	82.5%	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