

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:56 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 32
Average Utilization: 75.0%
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	63.8%	2,169	1,957	99.4%	78.9%	Improvement Needed
Distribution Center B	Dallas, TX	49.5%	2,712	3,794	97.9%	68.8%	Improvement Needed
Distribution Center C	Atlanta, GA	69.2%	1,495	2,413	95.1%	94.9%	Optimized
Distribution Center D	Los Angeles, CA	77.7%	1,355	3,227	97.4%	66.7%	Improvement Needed
Distribution Center E	Newark, NJ	62.3%	1,144	1,805	96.5%	65.7%	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