

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:19 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 58
Average Utilization: 73.6%
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	53.5%	2,277	2,055	98.3%	75.9%	Improvement Needed
Distribution Center B	Dallas, TX	44.8%	1,433	3,174	95.8%	94.1%	Optimized
Distribution Center C	Atlanta, GA	56.7%	2,539	2,479	98.8%	68.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	54.1%	1,689	3,793	96.1%	65.4%	Improvement Needed
Distribution Center E	Newark, NJ	72.7%	2,665	1,717	95.1%	64.7%	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