

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:59 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 78
Average Utilization: 71.7%
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	46.3%	2,149	2,267	98.0%	63.0%	Improvement Needed
Distribution Center B	Dallas, TX	96.9%	1,536	2,598	96.1%	76.3%	Improvement Needed
Distribution Center C	Atlanta, GA	80.8%	1,438	3,120	97.3%	88.5%	Optimized
Distribution Center D	Los Angeles, CA	86.9%	2,310	3,318	97.9%	70.5%	Improvement Needed
Distribution Center E	Newark, NJ	110.3%	2,849	1,566	99.4%	60.5%	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