

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:09:18 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 27
Average Utilization: 72.3%
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	95.5%	1,202	3,197	96.4%	65.5%	Improvement Needed
Distribution Center B	Dallas, TX	102.4%	2,547	1,565	97.8%	64.5%	Improvement Needed
Distribution Center C	Atlanta, GA	72.0%	2,911	3,372	96.2%	93.0%	Optimized
Distribution Center D	Los Angeles, CA	49.2%	2,801	1,629	95.9%	67.0%	Improvement Needed
Distribution Center E	Newark, NJ	40.3%	2,576	2,832	98.7%	71.6%	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