

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:58 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 38
Average Utilization: 74.7%
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	49.1%	1,512	2,042	96.0%	61.7%	Improvement Needed
Distribution Center B	Dallas, TX	65.9%	2,435	3,648	97.3%	83.7%	Optimized
Distribution Center C	Atlanta, GA	60.5%	1,555	2,108	95.5%	72.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	86.2%	2,024	1,626	97.2%	76.7%	Improvement Needed
Distribution Center E	Newark, NJ	83.6%	1,127	3,653	97.2%	79.5%	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