

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:55 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 77.5%
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	53.7%	2,117	3,998	95.5%	80.8%	Optimized
	Dallas, TX	67.4%	1,920	3,108	95.1%	92.2%	Optimized
Distribution Center B	Atlanta, GA	67.9%	1,640	1,537	96.3%	65.3%	Improvement Needed
Distribution Center C	Los Angeles, CA	43.3%	1,888	2,064	95.5%	83.4%	Optimized
Distribution Center D	Newark, NJ	121.2%	2,661	3,190	96.4%	65.8%	Improvement Needed
Distribution Center E							

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