

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:51 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 54
Average Utilization: 79.4%
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	51.7%	1,575	2,895	99.2%	69.1%	Improvement Needed
Distribution Center B	Dallas, TX	55.9%	2,235	2,076	98.1%	69.7%	Improvement Needed
Distribution Center C	Atlanta, GA	111.1%	2,506	3,255	99.4%	83.4%	Optimized
Distribution Center D	Los Angeles, CA	32.6%	1,813	2,775	99.3%	81.8%	Optimized
Distribution Center E	Newark, NJ	88.1%	2,626	3,178	98.4%	93.2%	Optimized

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