

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:15 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 77.4%
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	63.2%	1,165	1,591	95.2%	62.5%	Improvement Needed
Distribution Center B	Dallas, TX	136.2%	2,932	3,640	97.6%	81.4%	Optimized
Distribution Center C	Atlanta, GA	58.4%	1,901	2,394	96.7%	61.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	73.7%	1,607	2,294	95.7%	94.8%	Optimized
Distribution Center E	Newark, NJ	56.1%	2,829	3,496	97.3%	86.4%	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