

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:26 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 41
Average Utilization: 72.6%
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	90.2%	2,132	3,428	97.1%	64.6%	Improvement Needed
Distribution Center B	Dallas, TX	85.3%	1,974	1,919	95.7%	62.8%	Improvement Needed
Distribution Center C	Atlanta, GA	44.5%	2,176	3,874	99.0%	71.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	60.6%	1,665	2,504	95.8%	71.3%	Improvement Needed
Distribution Center E	Newark, NJ	66.1%	1,209	2,519	99.5%	92.5%	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