

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:03 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 31
Average Utilization: 69.6%
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	63.4%	2,464	1,995	95.9%	62.7%	Improvement Needed
Distribution Center B	Dallas, TX	46.1%	2,816	3,643	97.0%	63.2%	Improvement Needed
Distribution Center C	Atlanta, GA	73.4%	1,180	3,332	97.7%	89.9%	Optimized
Distribution Center D	Los Angeles, CA	97.3%	1,227	3,252	97.4%	69.9%	Improvement Needed
Distribution Center E	Newark, NJ	91.0%	2,506	3,467	95.9%	62.3%	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