

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:38 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 49
Average Utilization: 75.1%
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	69.9%	2,102	3,823	97.7%	69.4%	Improvement Needed
Distribution Center B	Dallas, TX	89.2%	1,331	2,989	95.8%	71.3%	Improvement Needed
Distribution Center C	Atlanta, GA	43.9%	1,864	1,626	99.3%	69.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	70.9%	2,789	3,976	97.0%	85.9%	Optimized
Distribution Center E	Newark, NJ	89.0%	1,589	3,124	95.1%	79.9%	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