

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:34 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 68
Average Utilization: 73.5%
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	42.9%	1,646	1,807	97.9%	74.2%	Improvement Needed
Distribution Center B	Dallas, TX	81.6%	2,421	2,433	96.1%	85.8%	Optimized
Distribution Center C	Atlanta, GA	60.3%	1,109	2,167	99.2%	76.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	74.9%	1,377	1,944	96.1%	64.2%	Improvement Needed
Distribution Center E	Newark, NJ	87.7%	1,870	3,079	96.5%	66.5%	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