

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:08:32 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 33
Average Utilization: 70.4%
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	67.3%	2,283	3,863	97.7%	77.9%	Improvement Needed
Distribution Center B	Dallas, TX	102.7%	1,293	1,861	96.6%	69.2%	Improvement Needed
Distribution Center C	Atlanta, GA	83.3%	2,507	2,347	95.5%	68.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	73.5%	2,329	2,825	95.1%	62.7%	Improvement Needed
Distribution Center E	Newark, NJ	88.2%	2,770	3,392	95.0%	73.8%	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