

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:23 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 64
Average Utilization: 72.1%
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	64.7%	2,976	1,754	98.5%	85.0%	Optimized
	Dallas, TX	97.5%	2,972	2,846	95.1%	64.9%	Improvement Needed
Distribution Center B	Atlanta, GA	47.1%	1,380	3,520	99.5%	62.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	66.7%	2,918	3,964	97.0%	69.3%	Improvement Needed
Distribution Center E	Newark, NJ	90.4%	1,757	1,588	99.3%	78.4%	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