

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:09:24 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 37
Average Utilization: 72.3%
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	125.7%	2,906	1,566	98.0%	87.6%	Optimized
	Dallas, TX	55.9%	1,184	3,167	95.4%	74.0%	Improvement Needed
Distribution Center B	Atlanta, GA	92.2%	2,497	3,925	98.8%	60.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	61.4%	2,483	1,829	95.6%	72.3%	Improvement Needed
Distribution Center E	Newark, NJ	87.8%	2,967	2,309	95.2%	67.2%	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