

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:17 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 47
Average Utilization: 84.7%
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	77.2%	1,841	3,247	98.4%	89.7%	Optimized
	Dallas, TX	77.1%	2,355	1,856	95.0%	86.4%	Optimized
Distribution Center B	Atlanta, GA	123.8%	1,239	2,387	96.9%	85.4%	Optimized
Distribution Center C	Los Angeles, CA	58.6%	2,343	1,964	95.8%	70.8%	Improvement Needed
Distribution Center D	Newark, NJ	66.8%	1,477	1,685	98.0%	91.1%	Optimized
Center E							

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