

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:28 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 53
Average Utilization: 88.5%
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	62.9%	2,275	2,544	95.6%	90.6%	Optimized
	Dallas, TX	42.0%	1,911	2,445	96.7%	78.7%	Improvement Needed
Distribution Center B	Atlanta, GA	116.9%	1,984	2,809	98.1%	88.6%	Optimized
Distribution Center C	Los Angeles, CA	58.3%	1,849	3,016	95.9%	93.7%	Optimized
Distribution Center D	Newark, NJ	95.9%	1,728	1,628	99.3%	90.8%	Optimized
Distribution 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