

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:44 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 31
Average Utilization: 83.1%
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	78.4%	2,457	1,763	96.4%	93.8%	Optimized
	Dallas, TX	84.7%	2,479	1,586	95.1%	87.3%	Optimized
Distribution Center B	Atlanta, GA	60.0%	2,027	3,077	99.3%	66.2%	Improvement Needed
Distribution Center C	Los Angeles, CA	92.2%	1,388	1,868	97.6%	73.8%	Improvement Needed
Distribution Center D	Newark, NJ	87.8%	1,221	3,638	99.4%	94.5%	Optimized

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