

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:26 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 61
Average Utilization: 80.7%
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	64.3%	2,128	2,926	99.4%	80.8%	Optimized
	Dallas, TX	92.4%	1,694	2,407	99.3%	86.2%	Optimized
Distribution Center B	Atlanta, GA	54.0%	1,538	3,064	99.1%	78.5%	Improvement Needed
Distribution Center C	Los Angeles, CA	36.7%	2,212	2,798	98.2%	77.7%	Improvement Needed
Distribution Center D	Newark, NJ	69.0%	2,810	3,778	95.9%	80.4%	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