

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:06 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 42
Average Utilization: 81.9%
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	108.3%	2,978	2,083	97.9%	81.5%	Optimized
	Dallas, TX	76.2%	2,291	2,312	98.7%	92.0%	Optimized
Distribution Center B	Atlanta, GA	32.4%	2,535	2,364	97.5%	74.5%	Improvement Needed
Distribution Center C	Los Angeles, CA	84.1%	2,666	1,823	97.0%	93.1%	Optimized
Distribution Center D	Newark, NJ	61.7%	2,242	1,713	95.9%	68.3%	Improvement Needed
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