

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:08:35 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 37
Average Utilization: 87.6%
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	61.8%	2,558	1,703	98.9%	93.2%	Optimized
	Dallas, TX	113.4%	2,417	1,846	98.0%	86.9%	Optimized
Distribution Center B	Atlanta, GA	67.2%	2,805	2,622	99.2%	90.7%	Optimized
Distribution Center C	Los Angeles, CA	58.2%	2,444	3,207	95.4%	72.5%	Improvement Needed
Distribution Center D	Newark, NJ	81.3%	2,858	2,988	98.4%	94.6%	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