

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:06:54 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 60
Average Utilization: 80.1%
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	79.1%	2,881	2,294	99.1%	85.9%	Optimized
	Dallas, TX	69.3%	1,952	3,150	97.1%	77.3%	Improvement Needed
Distribution Center B	Atlanta, GA	46.6%	1,139	3,364	96.4%	87.4%	Optimized
Distribution Center C	Los Angeles, CA	50.5%	2,618	2,378	95.6%	65.5%	Improvement Needed
	Newark, NJ	57.8%	1,512	1,849	95.2%	84.3%	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