

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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

Automation Overview

Total Warehouses: 5
Total Robots: 42
Average Utilization: 78.9%
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	54.3%	1,647	3,306	95.0%	73.6%	Improvement Needed
Distribution Center B	Dallas, TX	49.2%	1,144	3,857	96.1%	80.2%	Optimized
Distribution Center C	Atlanta, GA	66.3%	2,920	2,044	97.4%	83.5%	Optimized
Distribution Center D	Los Angeles, CA	77.4%	1,475	2,874	98.2%	65.4%	Improvement Needed
Distribution Center E	Newark, NJ	86.2%	1,786	1,961	98.0%	91.8%	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