

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:21 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 72.4%
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	89.6%	1,815	3,834	99.5%	67.3%	Improvement Needed
Distribution Center B	Dallas, TX	64.1%	2,304	3,070	98.6%	61.5%	Improvement Needed
Distribution Center C	Atlanta, GA	106.4%	1,249	3,239	97.8%	74.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	61.4%	2,843	3,661	99.1%	78.1%	Improvement Needed
Distribution Center E	Newark, NJ	77.0%	1,295	3,647	98.5%	81.0%	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