

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:56 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 76.3%
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	59.8%	1,004	2,175	99.0%	76.6%	Improvement Needed
Distribution Center B	Dallas, TX	114.0%	1,655	3,885	96.3%	62.7%	Improvement Needed
Distribution Center C	Atlanta, GA	66.5%	1,976	3,437	96.5%	78.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	66.3%	1,358	2,684	98.9%	85.7%	Optimized
Distribution Center E	Newark, NJ	78.5%	1,500	3,264	96.4%	78.1%	Improvement Needed

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