

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:45 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 24
Average Utilization: 72.9%
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	83.1%	2,610	2,106	97.7%	77.3%	Improvement Needed
Distribution Center B	Dallas, TX	89.5%	1,758	3,166	98.7%	64.6%	Improvement Needed
Distribution Center C	Atlanta, GA	47.7%	1,777	1,677	97.6%	61.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	83.9%	2,335	3,329	96.2%	94.6%	Optimized
Distribution Center E	Newark, NJ	58.6%	1,131	1,578	95.9%	66.8%	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