

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:47 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44
Average Utilization: 71.2%
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	99.0%	2,720	3,066	98.0%	62.5%	Improvement Needed
Distribution Center B	Dallas, TX	60.3%	1,867	3,436	96.9%	63.7%	Improvement Needed
Distribution Center C	Atlanta, GA	70.0%	2,592	1,982	95.1%	83.4%	Optimized
Distribution Center D	Los Angeles, CA	119.0%	1,240	3,332	97.1%	66.7%	Improvement Needed
Distribution Center E	Newark, NJ	45.7%	2,144	2,076	97.0%	79.7%	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