

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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

Automation Overview

Total Warehouses: 5
Total Robots: 52
Average Utilization: 70.2%
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	43.3%	1,078	2,555	99.1%	65.5%	Improvement Needed
Distribution Center B	Dallas, TX	59.6%	2,125	3,941	98.8%	94.6%	Optimized
Distribution Center C	Atlanta, GA	69.8%	2,837	3,916	95.1%	67.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	84.0%	2,145	3,424	97.8%	61.9%	Improvement Needed
Distribution Center E	Newark, NJ	64.1%	1,853	3,990	97.9%	61.1%	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