

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:30 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 60
Average Utilization: 75.5%
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	71.4%	1,200	3,137	98.8%	61.9%	Improvement Needed
Distribution Center B	Dallas, TX	70.3%	2,217	2,742	97.5%	77.6%	Improvement Needed
Distribution Center C	Atlanta, GA	62.0%	2,790	3,623	98.8%	75.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	71.1%	1,586	3,198	99.0%	77.1%	Improvement Needed
Distribution Center E	Newark, NJ	86.2%	2,671	2,388	95.1%	85.3%	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