

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:26 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 56
Average Utilization: 79.9%
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	62.3%	1,143	2,555	96.7%	69.8%	Improvement Needed
Distribution Center B	Dallas, TX	82.6%	1,281	2,676	96.9%	86.1%	Optimized
Distribution Center C	Atlanta, GA	49.2%	2,811	2,602	95.9%	67.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	97.1%	2,513	2,371	97.6%	82.1%	Optimized
Distribution Center E	Newark, NJ	71.8%	2,390	1,780	95.4%	94.1%	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