

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:15 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 34
Average Utilization: 77.2%
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	67.0%	1,111	2,503	97.0%	79.8%	Improvement Needed
Distribution Center B	Dallas, TX	114.2%	2,278	3,084	96.1%	90.7%	Optimized
Distribution Center C	Atlanta, GA	53.4%	1,024	3,858	96.7%	72.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	71.6%	1,120	3,178	97.1%	77.8%	Improvement Needed
Distribution Center E	Newark, NJ	68.3%	1,352	3,547	97.3%	65.8%	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