

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:04 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 25
Average Utilization: 75.3%
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	45.7%	1,068	3,443	96.0%	66.0%	Improvement Needed
Distribution Center B	Dallas, TX	45.6%	2,872	3,200	97.6%	73.4%	Improvement Needed
Distribution Center C	Atlanta, GA	82.9%	2,597	2,291	97.3%	90.2%	Optimized
Distribution Center D	Los Angeles, CA	41.1%	2,447	1,845	96.0%	72.9%	Improvement Needed
Distribution Center E	Newark, NJ	36.8%	2,427	3,216	98.2%	74.2%	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