

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:23 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 59
Average Utilization: 73.4%
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	97.3%	2,398	1,699	99.4%	78.3%	Improvement Needed
Distribution Center B	Dallas, TX	44.6%	1,255	3,038	95.8%	60.7%	Improvement Needed
Distribution Center C	Atlanta, GA	55.2%	2,263	2,594	95.4%	89.9%	Optimized
Distribution Center D	Los Angeles, CA	72.5%	2,685	3,804	96.6%	60.6%	Improvement Needed
Distribution Center E	Newark, NJ	67.9%	2,069	2,178	96.1%	77.5%	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