

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:00 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 58
Average Utilization: 76.9%
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	46.0%	2,627	3,471	96.0%	79.5%	Improvement Needed
Distribution Center B	Dallas, TX	40.0%	1,538	1,757	95.8%	94.1%	Optimized
Distribution Center C	Atlanta, GA	67.1%	1,304	2,742	95.7%	64.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	67.0%	2,491	1,822	97.5%	67.0%	Improvement Needed
Distribution Center E	Newark, NJ	90.4%	1,347	1,800	98.6%	79.4%	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