

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:05:10 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 42
Average Utilization: 68.9%
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	104.4%	2,131	1,617	97.9%	62.8%	Improvement Needed
Distribution Center B	Dallas, TX	71.4%	1,275	2,969	96.5%	81.2%	Optimized
Distribution Center C	Atlanta, GA	103.8%	1,399	2,212	97.1%	71.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	52.2%	2,239	2,991	95.8%	63.5%	Improvement Needed
Distribution Center E	Newark, NJ	51.2%	1,249	3,701	98.5%	66.0%	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