

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:09:16 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 52
Average Utilization: 82.9%
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	104.9%	1,015	3,583	95.1%	71.6%	Improvement Needed
Distribution Center B	Dallas, TX	45.9%	1,363	2,250	95.6%	88.6%	Optimized
Distribution Center C	Atlanta, GA	66.1%	1,414	3,814	98.1%	90.8%	Optimized
Distribution Center D	Los Angeles, CA	66.1%	2,398	2,893	96.1%	75.0%	Improvement Needed
Distribution Center E	Newark, NJ	61.8%	2,429	2,303	95.3%	88.5%	Optimized

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