

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:45 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 52
Average Utilization: 76.2%
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	120.4%	1,270	3,782	98.8%	72.6%	Improvement Needed
Distribution Center B	Dallas, TX	38.1%	1,859	3,373	96.9%	78.1%	Improvement Needed
Distribution Center C	Atlanta, GA	74.1%	2,320	2,623	99.3%	87.8%	Optimized
Distribution Center D	Los Angeles, CA	31.8%	1,288	3,042	96.1%	67.1%	Improvement Needed
Distribution Center E	Newark, NJ	74.0%	1,094	3,772	97.7%	75.1%	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