

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:06:37 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 47
Average Utilization: 75.9%
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	46.9%	1,739	3,695	97.9%	72.6%	Improvement Needed
Distribution Center B	Dallas, TX	98.5%	1,167	1,603	96.6%	93.9%	Optimized
Distribution Center C	Atlanta, GA	93.3%	1,618	1,769	98.4%	77.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	101.3%	1,878	2,452	98.0%	68.5%	Improvement Needed
Distribution Center E	Newark, NJ	46.8%	1,036	3,381	96.2%	66.7%	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