

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:06:15 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 59
Average Utilization: 76.5%
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	70.8%	1,918	1,944	96.2%	70.3%	Improvement Needed
Distribution Center B	Dallas, TX	60.2%	2,358	3,062	98.8%	93.1%	Optimized
Distribution Center C	Atlanta, GA	39.5%	1,099	3,535	98.3%	71.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	46.6%	2,737	2,598	96.6%	71.3%	Improvement Needed
Distribution Center E	Newark, NJ	68.1%	1,182	1,546	95.9%	76.5%	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