

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:53 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 49
Average Utilization: 74.6%
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	78.7%	1,768	2,082	97.5%	81.6%	Optimized
	Dallas, TX	70.2%	2,806	1,767	95.9%	89.3%	Optimized
Distribution Center B	Atlanta, GA	85.9%	1,526	2,513	96.3%	61.2%	Improvement Needed
Distribution Center C	Los Angeles, CA	109.8%	2,747	2,900	95.3%	60.1%	Improvement Needed
Distribution Center D	Newark, NJ	46.0%	1,576	2,203	96.8%	80.7%	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