

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:20 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 41
Average Utilization: 78.2%
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	66.7%	2,493	2,802	96.9%	81.9%	Optimized
	Dallas, TX	106.1%	1,142	2,581	95.4%	62.1%	Improvement Needed
Distribution Center B	Atlanta, GA	116.6%	2,812	1,591	99.5%	94.4%	Optimized
Distribution Center C	Los Angeles, CA	101.1%	2,368	2,432	97.3%	90.5%	Optimized
Distribution Center D	Newark, NJ	127.6%	2,800	1,802	96.4%	62.0%	Improvement Needed
Distribution Center E							

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