

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:51 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 37
Average Utilization: 77.4%
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	79.9%	2,128	2,544	96.6%	82.3%	Optimized
	Dallas, TX	90.1%	1,326	3,386	95.4%	73.2%	Improvement Needed
Distribution Center B	Atlanta, GA	49.4%	1,907	2,943	98.9%	84.2%	Optimized
Distribution Center C	Los Angeles, CA	93.7%	2,568	2,973	97.7%	85.3%	Optimized
Distribution Center D	Newark, NJ	52.4%	2,325	3,050	97.9%	61.8%	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