

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:08:54 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36
Average Utilization: 81.5%
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	52.4%	1,050	3,118	96.7%	91.3%	Optimized
	Dallas, TX	48.8%	2,629	2,501	97.8%	82.6%	Optimized
Distribution Center B	Atlanta, GA	41.2%	2,510	3,105	98.4%	69.9%	Improvement Needed
Distribution Center C	Los Angeles, CA	75.0%	2,172	2,286	98.5%	88.7%	Optimized
Distribution Center D	Newark, NJ	72.1%	2,622	2,781	96.5%	75.3%	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