

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:28 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 30
Average Utilization: 83.2%
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	96.4%	1,544	3,155	97.1%	95.0%	Optimized
	Dallas, TX	93.5%	2,046	3,617	96.9%	71.0%	Improvement Needed
Distribution Center B	Atlanta, GA	122.1%	1,716	2,648	95.8%	86.7%	Optimized
Distribution Center C	Los Angeles, CA	68.0%	1,101	3,538	96.5%	80.3%	Optimized
Distribution Center D	Newark, NJ	91.3%	1,510	1,746	97.0%	83.3%	Optimized
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