

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:06:39 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 25
Average Utilization: 83.1%
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	91.2%	1,479	2,119	97.9%	91.0%	Optimized
	Dallas, TX	73.4%	1,123	3,949	98.2%	70.3%	Improvement Needed
Distribution Center B	Atlanta, GA	67.4%	1,119	3,032	96.8%	92.0%	Optimized
Distribution Center C	Los Angeles, CA	81.5%	1,003	2,577	96.6%	82.1%	Optimized
Distribution Center D	Newark, NJ	50.3%	2,096	1,778	96.1%	80.1%	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