

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:51 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 83.9%
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	69.6%	1,092	2,324	97.4%	93.8%	Optimized
	Dallas, TX	59.6%	1,314	3,504	99.2%	76.9%	Improvement Needed
Distribution Center B	Atlanta, GA	55.3%	2,506	3,871	95.8%	86.0%	Optimized
Distribution Center C	Los Angeles, CA	72.4%	2,114	3,843	99.4%	82.0%	Optimized
Distribution Center D	Newark, NJ	34.9%	2,855	2,735	97.0%	80.9%	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