

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:55 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 28
Average Utilization: 71.1%
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	39.6%	1,481	3,979	95.1%	62.4%	Improvement Needed
Distribution Center B	Dallas, TX	40.6%	2,882	2,211	95.1%	75.1%	Improvement Needed
Distribution Center C	Atlanta, GA	57.8%	1,068	3,625	97.2%	65.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	115.2%	2,750	3,276	97.8%	69.0%	Improvement Needed
Distribution Center E	Newark, NJ	89.3%	1,992	1,988	97.8%	83.8%	Optimized

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