

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:05:32 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 59
Average Utilization: 70.1%
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 Status	
Distribution Center A	Chicago, IL	57.2%	2,306	3,908	97.0%	85.8%	Optimized
	Dallas, TX	82.4%	1,617	2,995	99.0%	66.8%	Improvement Needed
Distribution Center B	Atlanta, GA	105.0%	1,485	2,898	98.8%	66.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	63.3%	1,157	2,287	98.4%	69.2%	Improvement Needed
Distribution Center E	Newark, NJ	62.9%	2,589	3,336	96.3%	61.8%	Improvement Needed

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