

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:10 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 51
Average Utilization: 74.0%
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	50.5%	2,675	3,197	96.3%	86.0%	Optimized
	Dallas, TX	47.6%	1,193	3,165	96.9%	64.6%	Improvement Needed
Distribution Center B	Atlanta, GA	83.0%	1,730	2,850	98.8%	63.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	77.1%	1,404	2,571	97.6%	76.6%	Improvement Needed
Distribution Center E	Newark, NJ	68.1%	2,723	2,691	96.3%	79.0%	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