

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:30 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 74
Average Utilization: 80.5%
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	91.3%	2,002	2,239	97.6%	83.5%	Optimized
	Dallas, TX	42.6%	2,138	2,524	99.1%	89.1%	Optimized
Distribution Center B	Atlanta, GA	69.5%	1,261	3,699	98.9%	85.6%	Optimized
Distribution Center C	Los Angeles, CA	56.5%	2,670	1,788	99.4%	72.4%	Improvement Needed
Distribution Center D	Newark, NJ	77.7%	2,945	1,972	98.4%	71.8%	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