

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:13 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 59
Average Utilization: 81.1%
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	54.5%	1,306	1,584	99.4%	94.4%	Optimized
	Dallas, TX	65.1%	2,006	2,303	95.5%	87.5%	Optimized
	Atlanta, GA	80.9%	2,703	3,478	98.7%	89.1%	Optimized
	Los Angeles, CA	76.4%	1,459	1,585	97.6%	73.4%	Improvement Needed
	Newark, NJ	63.0%	2,439	3,916	99.4%	61.2%	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