

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:50 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 51
Average Utilization: 88.2%
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	93.8%	1,065	2,171	95.3%	86.1%	Optimized
	Dallas, TX	106.1%	1,946	2,816	96.8%	90.0%	Optimized
Distribution Center B	Atlanta, GA	40.3%	1,178	2,324	96.3%	75.3%	Improvement Needed
Distribution Center C	Los Angeles, CA	36.0%	1,199	2,949	97.3%	94.9%	Optimized
Distribution Center D	Newark, NJ	54.1%	2,388	1,966	95.8%	94.7%	Optimized
Distribution Center E							

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