

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:51 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 55
Average Utilization: 72.2%
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	97.7%	2,594	2,984	95.2%	78.3%	Improvement Needed
Distribution Center B	Dallas, TX	86.8%	1,885	2,034	98.7%	72.7%	Improvement Needed
Distribution Center C	Atlanta, GA	53.8%	2,090	1,907	99.2%	63.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	130.5%	2,369	1,699	96.5%	74.5%	Improvement Needed
Distribution Center E	Newark, NJ	75.3%	2,293	1,942	99.1%	72.3%	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