

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:46 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 64
Average Utilization: 79.4%
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	85.1%	2,162	3,408	98.1%	65.6%	Improvement Needed
Distribution Center B	Dallas, TX	71.0%	1,973	3,885	96.9%	74.0%	Improvement Needed
Distribution Center C	Atlanta, GA	66.4%	2,443	2,074	98.2%	84.3%	Optimized
Distribution Center D	Los Angeles, CA	50.7%	1,795	3,453	97.9%	85.5%	Optimized
Distribution Center E	Newark, NJ	67.5%	1,830	3,241	97.5%	87.7%	Optimized

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