

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:08:17 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 32
Average Utilization: 77.7%
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	76.5%	1,496	1,947	97.7%	77.1%	Improvement Needed
Distribution Center B	Dallas, TX	113.4%	1,797	3,858	98.1%	61.5%	Improvement Needed
Distribution Center C	Atlanta, GA	53.1%	2,214	2,965	99.2%	88.8%	Optimized
Distribution Center D	Los Angeles, CA	77.6%	1,790	2,326	97.4%	80.6%	Optimized
Distribution Center E	Newark, NJ	34.9%	2,859	1,805	99.0%	80.5%	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