

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:55 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 80.7%
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	47.5%	1,836	1,709	95.8%	63.0%	Improvement Needed
Distribution Center B	Dallas, TX	70.2%	1,573	2,901	96.7%	81.2%	Optimized
Distribution Center C	Atlanta, GA	89.5%	2,721	2,897	96.2%	79.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	51.0%	2,349	2,157	95.9%	92.0%	Optimized
Distribution Center E	Newark, NJ	49.1%	1,583	3,185	97.9%	87.4%	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