

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:48 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 37
Average Utilization: 81.2%
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	33.2%	1,691	3,358	96.2%	65.8%	Improvement Needed
Distribution Center B	Dallas, TX	78.1%	1,164	2,314	98.3%	87.8%	Optimized
Distribution Center C	Atlanta, GA	40.9%	1,996	2,087	97.9%	86.8%	Optimized
Distribution Center D	Los Angeles, CA	61.6%	1,476	3,610	99.1%	71.0%	Improvement Needed
Distribution Center E	Newark, NJ	80.4%	2,885	2,276	98.2%	94.3%	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