

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:05 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 79.9%
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	85.3%	1,061	1,616	96.4%	70.0%	Improvement Needed
Distribution Center B	Dallas, TX	82.3%	1,572	1,558	96.7%	84.7%	Optimized
Distribution Center C	Atlanta, GA	100.0%	2,284	2,484	99.4%	82.8%	Optimized
Distribution Center D	Los Angeles, CA	51.5%	1,666	1,644	98.1%	70.5%	Improvement Needed
Distribution Center E	Newark, NJ	74.0%	1,559	3,706	95.3%	91.6%	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