

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:52 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
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	55.3%	1,943	2,278	96.4%	69.6%	Improvement Needed
Distribution Center B	Dallas, TX	58.3%	1,008	3,668	96.6%	85.9%	Optimized
Distribution Center C	Atlanta, GA	86.8%	2,103	2,727	95.9%	90.3%	Optimized
Distribution Center D	Los Angeles, CA	77.3%	1,329	3,455	99.5%	93.6%	Optimized
Distribution Center E	Newark, NJ	80.8%	1,275	2,502	96.7%	64.0%	Improvement Needed

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