

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:16 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36
Average Utilization: 81.8%
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	93.0%	2,552	3,410	97.9%	62.3%	Improvement Needed
Distribution Center B	Dallas, TX	51.3%	2,102	3,578	99.2%	80.2%	Optimized
Distribution Center C	Atlanta, GA	122.3%	2,756	3,061	96.5%	90.4%	Optimized
Distribution Center D	Los Angeles, CA	67.8%	2,009	3,253	95.6%	82.3%	Optimized
Distribution Center E	Newark, NJ	40.9%	1,634	3,938	96.9%	93.4%	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