

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:19 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 47
Average Utilization: 83.6%
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	41.5%	2,061	3,168	99.0%	66.6%	Improvement Needed
Distribution Center B	Dallas, TX	54.6%	2,443	2,628	96.8%	83.9%	Optimized
Distribution Center C	Atlanta, GA	106.8%	2,834	1,667	95.8%	82.8%	Optimized
Distribution Center D	Los Angeles, CA	89.7%	2,790	1,888	96.1%	93.9%	Optimized
Distribution Center E	Newark, NJ	70.3%	1,059	2,770	95.8%	90.6%	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