

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:37 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 49
Average Utilization: 79.6%
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	44.2%	2,178	2,977	96.1%	62.5%	Improvement Needed
Distribution Center B	Dallas, TX	87.0%	2,793	3,407	95.6%	81.4%	Optimized
Distribution Center C	Atlanta, GA	54.7%	1,679	2,288	97.1%	93.1%	Optimized
Distribution Center D	Los Angeles, CA	116.9%	1,121	3,627	95.7%	89.6%	Optimized
Distribution Center E	Newark, NJ	31.9%	2,713	1,800	97.3%	71.3%	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