

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:45 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 55
Average Utilization: 80.8%
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	100.9%	1,534	3,584	95.9%	64.7%	Improvement Needed
Distribution Center B	Dallas, TX	73.7%	1,673	3,873	99.5%	86.2%	Optimized
Distribution Center C	Atlanta, GA	69.2%	1,094	1,996	97.4%	81.5%	Optimized
Distribution Center D	Los Angeles, CA	92.5%	1,837	2,180	96.1%	90.6%	Optimized
Distribution Center E	Newark, NJ	80.9%	2,549	1,531	95.6%	80.9%	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