

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:45 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 75
Average Utilization: 77.7%
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	68.9%	1,441	3,272	98.2%	77.7%	Improvement Needed
Distribution Center B	Dallas, TX	60.0%	1,692	3,097	95.2%	61.8%	Improvement Needed
Distribution Center C	Atlanta, GA	81.7%	2,563	3,954	97.7%	80.0%	Optimized
Distribution Center D	Los Angeles, CA	53.3%	2,565	3,340	99.1%	89.0%	Optimized
Distribution Center E	Newark, NJ	93.6%	1,647	2,217	96.0%	80.3%	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