

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:50 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 55
Average Utilization: 81.2%
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	37.5%	2,308	2,226	96.8%	71.1%	Improvement Needed
Distribution Center B	Dallas, TX	104.1%	2,690	1,588	95.7%	60.7%	Improvement Needed
Distribution Center C	Atlanta, GA	59.1%	1,171	2,266	96.8%	89.5%	Optimized
Distribution Center D	Los Angeles, CA	64.7%	1,255	3,006	96.8%	93.2%	Optimized
Distribution Center E	Newark, NJ	90.1%	2,940	2,471	96.0%	91.5%	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