

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:14 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 81.0%
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	78.6%	2,849	2,036	99.2%	72.1%	Improvement Needed
Distribution Center B	Dallas, TX	68.6%	1,856	2,591	98.8%	90.4%	Optimized
Distribution Center C	Atlanta, GA	118.4%	2,887	3,384	98.5%	65.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	53.6%	1,047	3,133	95.8%	86.4%	Optimized
Distribution Center E	Newark, NJ	58.5%	2,317	3,267	98.7%	90.7%	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