

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:08:30 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 79.1%
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	72.4%	1,186	2,149	98.7%	65.7%	Improvement Needed
Distribution Center B	Dallas, TX	78.7%	1,607	2,886	95.4%	82.5%	Optimized
Distribution Center C	Atlanta, GA	47.5%	1,753	3,655	97.7%	92.3%	Optimized
Distribution Center D	Los Angeles, CA	61.5%	1,783	3,506	99.3%	83.0%	Optimized
Distribution Center E	Newark, NJ	75.4%	1,462	2,754	99.4%	72.0%	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