

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:09 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 79.7%
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	50.9%	2,945	3,394	96.7%	73.1%	Improvement Needed
Distribution Center B	Dallas, TX	70.2%	1,551	1,546	99.4%	87.0%	Optimized
Distribution Center C	Atlanta, GA	77.4%	1,773	3,190	97.5%	80.7%	Optimized
Distribution Center D	Los Angeles, CA	70.8%	2,373	3,706	97.4%	67.7%	Improvement Needed
Distribution Center E	Newark, NJ	47.8%	1,666	3,406	97.5%	89.7%	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