

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:57 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 69.9%
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	44.9%	1,818	1,546	97.9%	60.7%	Improvement Needed
Distribution Center B	Dallas, TX	76.1%	1,761	3,805	98.8%	80.6%	Optimized
Distribution Center C	Atlanta, GA	35.1%	2,422	2,870	97.3%	68.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	35.4%	2,409	3,365	95.3%	76.3%	Improvement Needed
Distribution Center E	Newark, NJ	44.4%	2,584	3,085	97.6%	63.9%	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