

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:37 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 30
Average Utilization: 73.4%
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	33.8%	1,293	2,818	96.6%	71.3%	Improvement Needed
Distribution Center B	Dallas, TX	33.6%	1,311	2,686	98.5%	67.7%	Improvement Needed
Distribution Center C	Atlanta, GA	70.2%	2,488	2,251	95.5%	81.6%	Optimized
Distribution Center D	Los Angeles, CA	55.4%	2,612	3,728	97.9%	75.4%	Improvement Needed
Distribution Center E	Newark, NJ	59.9%	2,191	2,314	98.9%	70.8%	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