

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:20 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 41
Average Utilization: 71.0%
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	127.0%	2,665	2,919	97.6%	73.5%	Improvement Needed
Distribution Center B	Dallas, TX	51.1%	1,584	2,355	95.8%	64.7%	Improvement Needed
Distribution Center C	Atlanta, GA	55.4%	2,544	2,052	96.9%	93.8%	Optimized
Distribution Center D	Los Angeles, CA	73.0%	2,789	2,926	95.9%	60.9%	Improvement Needed
Distribution Center E	Newark, NJ	59.3%	1,291	2,557	95.6%	61.9%	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