

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:41 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 57
Average Utilization: 75.0%
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	53.8%	2,341	2,004	96.6%	79.4%	Improvement Needed
Distribution Center B	Dallas, TX	47.6%	1,655	1,828	96.0%	60.9%	Improvement Needed
Distribution Center C	Atlanta, GA	60.1%	2,084	3,553	98.5%	75.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	106.3%	1,751	1,559	95.3%	88.9%	Optimized
Distribution Center E	Newark, NJ	72.4%	1,078	2,326	95.9%	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