

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:06 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 31
Average Utilization: 72.7%
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	101.5%	1,497	1,810	95.7%	62.4%	Improvement Needed
Distribution Center B	Dallas, TX	85.0%	1,501	2,648	99.1%	79.1%	Improvement Needed
Distribution Center C	Atlanta, GA	76.6%	2,375	2,273	95.5%	68.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	52.3%	1,338	2,726	96.7%	90.5%	Optimized
Distribution Center E	Newark, NJ	61.6%	1,943	3,937	96.0%	62.6%	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