

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:08:09 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 63
Average Utilization: 70.9%
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	41.9%	1,723	2,520	98.7%	66.4%	Improvement Needed
Distribution Center B	Dallas, TX	90.1%	2,266	2,928	96.6%	64.3%	Improvement Needed
Distribution Center C	Atlanta, GA	67.9%	1,239	1,756	96.1%	62.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	70.3%	2,995	3,554	95.3%	88.7%	Optimized
Distribution Center E	Newark, NJ	76.4%	1,052	2,523	95.5%	72.9%	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