

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: 27
Average Utilization: 76.9%
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	75.7%	1,555	3,004	95.9%	78.4%	Improvement Needed
Distribution Center B	Dallas, TX	54.6%	2,788	3,396	97.3%	67.7%	Improvement Needed
Distribution Center C	Atlanta, GA	46.1%	2,162	3,067	95.6%	65.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	65.8%	1,540	3,208	98.9%	94.2%	Optimized
Distribution Center E	Newark, NJ	64.5%	1,692	3,650	99.5%	78.2%	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