

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:14 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 67
Average Utilization: 74.8%
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	60.0%	2,846	3,500	99.4%	68.9%	Improvement Needed
Distribution Center B	Dallas, TX	98.7%	2,118	3,496	95.8%	83.4%	Optimized
Distribution Center C	Atlanta, GA	56.9%	1,076	1,548	96.0%	75.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	54.9%	1,758	1,736	99.5%	72.9%	Improvement Needed
Distribution Center E	Newark, NJ	52.0%	1,965	1,758	95.3%	73.1%	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