

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:46 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 69.2%
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	61.2%	1,009	3,086	95.2%	61.5%	Improvement Needed
Distribution Center B	Dallas, TX	66.4%	1,067	3,590	99.5%	69.6%	Improvement Needed
Distribution Center C	Atlanta, GA	88.0%	2,397	1,556	99.1%	62.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	76.2%	2,147	3,885	95.3%	70.9%	Improvement Needed
Distribution Center E	Newark, NJ	83.7%	2,416	2,958	96.3%	81.2%	Optimized

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