

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:05:05 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 47
Average Utilization: 75.2%
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	45.4%	1,736	3,289	97.1%	74.7%	Improvement Needed
Distribution Center B	Dallas, TX	69.4%	2,046	2,712	97.5%	63.1%	Improvement Needed
Distribution Center C	Atlanta, GA	94.6%	1,350	3,568	95.9%	78.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	85.1%	2,925	3,566	99.2%	82.1%	Optimized
Distribution Center E	Newark, NJ	76.7%	1,957	1,585	96.3%	77.8%	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