

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:20 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 55
Average Utilization: 75.4%
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	74.1%	2,859	2,993	99.0%	61.6%	Improvement Needed
Distribution Center B	Dallas, TX	48.2%	1,617	3,572	98.6%	74.2%	Improvement Needed
Distribution Center C	Atlanta, GA	40.7%	1,067	2,606	95.2%	74.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	71.4%	2,565	2,167	98.4%	93.1%	Optimized
Distribution Center E	Newark, NJ	53.9%	2,962	2,911	98.5%	74.0%	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