

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:32 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36
Average Utilization: 75.9%
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	58.5%	1,041	1,863	97.7%	71.3%	Improvement Needed
Distribution Center B	Dallas, TX	50.0%	2,209	2,898	97.3%	76.7%	Improvement Needed
Distribution Center C	Atlanta, GA	47.7%	2,254	3,249	98.2%	79.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	93.3%	1,856	3,167	98.9%	71.8%	Improvement Needed
Distribution Center E	Newark, NJ	43.0%	2,944	3,422	98.1%	80.6%	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