

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:52 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 65
Average Utilization: 73.3%
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	38.1%	1,025	2,320	98.3%	71.8%	Improvement Needed
Distribution Center B	Dallas, TX	104.5%	2,090	3,879	96.2%	60.4%	Improvement Needed
Distribution Center C	Atlanta, GA	72.4%	1,815	2,227	96.6%	64.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	72.0%	2,007	2,143	95.6%	93.1%	Optimized
Distribution Center E	Newark, NJ	72.8%	1,030	2,003	99.0%	76.5%	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