Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:05:51 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 23
Average Utilization: 72.1%
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	72.0%	1,469	1,527	98.0%	68.3%	Improvement Needed
Distribution Center B	Dallas, TX	55.9%	2,917	2,911	96.8%	76.9%	Improvement Needed
Distribution Center C	Atlanta, GA	53.1%	2,837	3,189	97.8%	66.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	66.6%	2,637	2,658	96.1%	73.2%	Improvement Needed
Distribution Center E	Newark, NJ	58.4%	2,667	3,751	95.8%	75.5%	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