Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:04 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 50
Average Utilization: 72.4%
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	96.1%	2,244	2,946	99.3%	71.2%	Improvement Needed
Distribution Center B	Dallas, TX	47.1%	2,257	3,590	99.1%	61.8%	Improvement Needed
Distribution Center C	Atlanta, GA	66.3%	2,132	3,641	95.9%	74.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	96.1%	2,107	1,558	98.0%	76.3%	Improvement Needed
Distribution Center E	Newark, NJ	69.4%	2,686	2,856	95.4%	78.6%	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