Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:54 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 22
Average Utilization: 73.5%
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	65.4%	1,663	2,689	99.5%	90.6%	Optimized
Distribution Center B	Dallas, TX	77.3%	2,158	2,390	98.0%	68.5%	Improvement Needed
Distribution Center C	Atlanta, GA	66.8%	2,539	2,119	97.7%	85.6%	Optimized
Distribution Center D	Los Angeles, CA	120.6%	1,593	2,777	95.2%	60.9%	Improvement Needed
Distribution Center E	Newark, NJ	67.8%	2,128	3,709	95.3%	61.8%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Imple

ment 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