Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:34 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 56
Average Utilization: 79.9%
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	57.1%	1,324	3,969	99.0%	83.4%	Optimized
Distribution Center B	Dallas, TX	107.9%	1,198	3,821	99.5%	80.3%	Optimized
Distribution Center C	Atlanta, GA	126.5%	2,846	3,172	95.2%	63.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	54.5%	2,524	3,536	97.8%	94.6%	Optimized
Distribution Center E	Newark, NJ	66.9%	1,157	3,849	96.6%	78.0%	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