Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:27 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 83.7%
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	80.0%	1,535	1,861	99.4%	93.8%	Optimized
Distribution Center B	Dallas, TX	45.5%	1,345	1,906	96.3%	88.6%	Optimized
Distribution Center C	Atlanta, GA	78.4%	2,946	3,560	99.4%	82.4%	Optimized
Distribution Center D	Los Angeles, CA	83.2%	1,909	2,547	97.1%	77.5%	Improvement Needed
Distribution Center E	Newark, NJ	73.5%	2,232	2,101	95.4%	76.2%	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