Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:41 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 35
Average Utilization: 76.9%
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	88.3%	1,153	2,212	95.3%	86.0%	Optimized
Distribution Center B	Dallas, TX	65.6%	1,950	2,563	95.8%	71.4%	Improvement Needed
Distribution Center C	Atlanta, GA	78.7%	2,072	2,450	95.9%	80.9%	Optimized
Distribution Center D	Los Angeles, CA	81.5%	2,168	2,542	98.1%	64.8%	Improvement Needed
Distribution Center E	Newark, NJ	64.1%	1,525	1,632	97.7%	81.5%	Optimized

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