Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:22 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 47
Average Utilization: 79.6%
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	54.5%	2,696	2,377	98.4%	93.0%	Optimized
Distribution Center B	Dallas, TX	84.9%	2,211	2,606	96.8%	72.6%	Improvement Needed
Distribution Center C	Atlanta, GA	126.1%	2,711	1,674	96.9%	89.1%	Optimized
Distribution Center D	Los Angeles, CA	63.0%	2,344	2,934	98.2%	80.2%	Optimized
Distribution Center E	Newark, NJ	41.8%	2,309	1,645	99.1%	63.4%	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