Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:38 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 41
Average Utilization: 74.6%
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	65.3%	2,711	2,068	97.0%	67.3%	Improvement Needed
Distribution Center B	Dallas, TX	52.3%	1,030	2,336	96.6%	65.8%	Improvement Needed
Distribution Center C	Atlanta, GA	45.8%	2,664	2,791	96.6%	86.8%	Optimized
Distribution Center D	Los Angeles, CA	91.5%	2,137	1,619	95.8%	71.4%	Improvement Needed
Distribution Center E	Newark, NJ	74.7%	2,086	3,041	99.4%	81.8%	Optimized

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