Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:33 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 64
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	83.5%	1,180	2,550	98.6%	61.3%	Improvement Needed
Distribution Center B	Dallas, TX	82.5%	2,496	3,130	96.7%	84.5%	Optimized
Distribution Center C	Atlanta, GA	50.8%	2,977	3,676	98.0%	68.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	120.9%	2,602	1,840	95.6%	91.1%	Optimized
Distribution Center E	Newark, NJ	60.3%	2,680	2,191	96.0%	94.3%	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