Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:17 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 40
Average Utilization: 82.5%
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	79.8%	2,384	3,154	99.1%	73.3%	Improvement Needed
Distribution Center B	Dallas, TX	71.3%	2,017	3,223	99.5%	95.0%	Optimized
Distribution Center C	Atlanta, GA	67.9%	2,477	2,111	98.3%	94.8%	Optimized
Distribution Center D	Los Angeles, CA	84.9%	1,619	3,439	98.3%	61.2%	Improvement Needed
Distribution Center E	Newark, NJ	106.0%	2,584	2,993	95.6%	88.2%	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