Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:05:06 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 58
Average Utilization: 72.9%
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	56.4%	2,642	3,751	96.1%	66.8%	Improvement Needed
Distribution Center B	Dallas, TX	66.0%	2,247	2,127	96.5%	61.1%	Improvement Needed
Distribution Center C	Atlanta, GA	40.0%	1,884	3,092	95.1%	70.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	59.3%	1,828	2,112	98.5%	94.6%	Optimized
Distribution Center E	Newark, NJ	67.4%	2,610	1,667	95.6%	71.7%	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