Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:21 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 55
Average Utilization: 76.0%
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	58.6%	2,350	3,325	98.8%	91.8%	Optimized
Distribution Center B	Dallas, TX	79.5%	2,841	1,992	98.8%	67.8%	Improvement Needed
Distribution Center C	Atlanta, GA	52.3%	1,220	2,229	97.2%	87.6%	Optimized
Distribution Center D	Los Angeles, CA	87.0%	1,980	1,685	96.8%	62.9%	Improvement Needed
Distribution Center E	Newark, NJ	61.1%	2,240	1,883	95.4%	70.1%	Improvement Needed

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