Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:08 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 49
Average Utilization: 76.4%
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	90.6%	2,054	2,858	96.9%	88.1%	Optimized
Distribution Center B	Dallas, TX	55.0%	2,130	3,841	98.0%	74.9%	Improvement Needed
Distribution Center C	Atlanta, GA	98.6%	1,086	3,062	96.9%	91.5%	Optimized
Distribution Center D	Los Angeles, CA	48.9%	1,117	3,025	95.9%	61.8%	Improvement Needed
Distribution Center E	Newark, NJ	58.8%	2,318	3,858	98.0%	65.8%	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