Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:09:18 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 78.9%
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	64.9%	2,838	3,366	98.6%	62.2%	Improvement Needed
Distribution Center B	Dallas, TX	66.0%	1,310	2,320	99.1%	78.5%	Improvement Needed
Distribution Center C	Atlanta, GA	50.5%	2,176	3,717	97.7%	80.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	74.8%	1,983	3,050	98.4%	86.6%	Optimized
Distribution Center E	Newark, NJ	35.0%	2,837	2,016	95.2%	87.4%	Optimized

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