Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:43 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36
Average Utilization: 81.6%
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	44.0%	1,783	2,534	98.5%	91.4%	Optimized
Distribution Center B	Dallas, TX	46.2%	2,446	2,488	99.0%	73.7%	Improvement Needed
Distribution Center C	Atlanta, GA	90.9%	2,540	2,854	96.7%	82.2%	Optimized
Distribution Center D	Los Angeles, CA	80.3%	2,582	2,700	96.5%	92.6%	Optimized
Distribution Center E	Newark, NJ	88.4%	2,838	1,529	97.5%	68.2%	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