Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:08:42 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 37
Average Utilization: 76.2%
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	63.7%	1,434	2,508	95.8%	81.5%	Optimized
Distribution Center B	Dallas, TX	69.3%	2,461	3,272	96.0%	90.1%	Optimized
Distribution Center C	Atlanta, GA	85.9%	2,130	1,776	96.3%	75.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	131.9%	1,694	2,847	96.0%	65.8%	Improvement Needed
Distribution Center E	Newark, NJ	33.9%	1,920	1,656	97.2%	67.7%	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