Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:54 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 32
Average Utilization: 77.0%
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	79.2%	2,779	3,367	97.2%	69.6%	Improvement Needed
Distribution Center B	Dallas, TX	55.7%	1,465	3,666	95.7%	68.5%	Improvement Needed
Distribution Center C	Atlanta, GA	111.6%	2,212	3,728	97.5%	83.7%	Optimized
Distribution Center D	Los Angeles, CA	98.5%	2,456	2,287	95.8%	79.8%	Improvement Needed
Distribution Center E	Newark, NJ	50.1%	2,265	1,535	95.0%	83.2%	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