Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:34 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 69
Average Utilization: 75.4%
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	74.7%	2,367	2,965	97.6%	79.3%	Improvement Needed
Distribution Center B	Dallas, TX	55.7%	1,600	3,237	97.2%	84.8%	Optimized
Distribution Center C	Atlanta, GA	52.8%	1,202	3,736	96.0%	83.1%	Optimized
Distribution Center D	Los Angeles, CA	48.8%	1,676	3,058	98.3%	62.6%	Improvement Needed
Distribution Center E	Newark, NJ	52.7%	1,840	2,239	96.8%	67.0%	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