Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:21 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 53
Average Utilization: 80.6%
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	90.2%	2,526	3,107	96.6%	72.6%	Improvement Needed
Distribution Center B	Dallas, TX	50.4%	2,467	3,055	95.8%	72.9%	Improvement Needed
Distribution Center C	Atlanta, GA	83.0%	2,869	3,157	97.8%	93.8%	Optimized
Distribution Center D	Los Angeles, CA	59.4%	2,944	2,324	96.2%	92.7%	Optimized
Distribution Center E	Newark, NJ	105.4%	2,059	1,613	96.7%	71.2%	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