Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:06:56 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 63
Average Utilization: 79.6%
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	96.3%	2,052	2,350	97.8%	80.6%	Optimized
Distribution Center B	Dallas, TX	89.4%	2,741	2,702	96.5%	80.8%	Optimized
Distribution Center C	Atlanta, GA	46.3%	1,247	2,255	97.1%	81.9%	Optimized
Distribution Center D	Los Angeles, CA	52.9%	1,430	2,819	97.7%	85.5%	Optimized
Distribution Center E	Newark, NJ	42.5%	2,750	1,600	97.7%	69.1%	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