Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:26 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 52
Average Utilization: 84.6%
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	72.1%	2,360	1,728	95.3%	89.8%	Optimized
Distribution Center B	Dallas, TX	37.0%	2,452	2,939	96.5%	73.8%	Improvement Needed
Distribution Center C	Atlanta, GA	116.9%	1,014	3,458	96.0%	76.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	75.2%	1,548	2,131	95.6%	93.4%	Optimized
Distribution Center E	Newark, NJ	81.0%	1,919	3,430	95.1%	89.4%	Optimized

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