Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:00 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 52
Average Utilization: 80.5%
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	53.0%	2,329	3,942	98.1%	85.7%	Optimized
Distribution Center B	Dallas, TX	53.8%	2,226	3,311	98.3%	82.6%	Optimized
Distribution Center C	Atlanta, GA	75.6%	2,647	2,400	98.5%	64.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	103.8%	1,081	2,237	98.6%	86.1%	Optimized
Distribution Center E	Newark, NJ	64.6%	1,936	3,768	96.5%	83.0%	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