Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:41 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 55
Average Utilization: 82.0%
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	50.1%	2,078	3,912	98.3%	88.3%	Optimized
Distribution Center B	Dallas, TX	70.1%	1,795	3,594	98.3%	90.8%	Optimized
Distribution Center C	Atlanta, GA	61.3%	2,928	2,688	97.0%	66.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	65.4%	1,501	1,789	96.9%	76.8%	Improvement Needed
Distribution Center E	Newark, NJ	42.6%	1,589	3,624	99.1%	87.2%	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