Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:08:01 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 58
Average Utilization: 80.3%
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	89.4%	2,176	2,580	97.2%	92.6%	Optimized
Distribution Center B	Dallas, TX	78.8%	1,070	1,524	96.6%	66.6%	Improvement Needed
Distribution Center C	Atlanta, GA	61.4%	1,600	2,536	99.0%	65.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	55.5%	1,778	2,368	97.4%	93.9%	Optimized
Distribution Center E	Newark, NJ	34.9%	2,960	3,025	98.5%	82.8%	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