Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:07 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 75
Average Utilization: 81.5%
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	52.7%	2,931	3,512	99.2%	94.6%	Optimized
Distribution Center B	Dallas, TX	74.4%	1,812	1,804	96.1%	86.2%	Optimized
Distribution Center C	Atlanta, GA	72.3%	1,769	3,578	97.7%	76.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	41.9%	2,373	3,754	96.7%	61.7%	Improvement Needed
Distribution Center E	Newark, NJ	70.3%	1,974	2,523	98.5%	88.5%	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