Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:48 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 61
Average Utilization: 84.3%
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	116.7%	1,546	3,745	96.6%	94.5%	Optimized
Distribution Center B	Dallas, TX	86.3%	1,925	3,240	96.7%	81.8%	Optimized
Distribution Center C	Atlanta, GA	86.1%	2,341	2,814	98.8%	69.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	50.9%	1,873	3,676	97.0%	81.1%	Optimized
Distribution Center E	Newark, NJ	36.5%	1,919	1,927	98.9%	94.4%	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