Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:02:32 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5 Total Robots: 72

Average Utilization: 74.3% 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 Status Level	
Distribution Chicago, IL Center A	69.1%	2,915	3,488	99.4%	79.3%	Improvemen t Needed
Distribution Dallas, TX Center B	70.2%	1,545	1,713	95.8%	69.6%	Improvemen t Needed
Distribution Atlanta, GA Center C	65.2%	2,888	2,273	95.4%	73.1%	Improvemen t Needed
Distribution Los	88.4%	1,970	1,508	97.2%	83.6%	Optimized
Center D Angeles, CA Distribution Newark, NJ Center E	⁴ 81.2%	2,636	3,504	95.8%	65.8%	Improvemen t Needed

Optimiz ation O pportun ities

Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%

- Imple ment voicepicking system to improve accuracy to 99.8%
- Upgra de WMS integration for real-time inventory visibility
- Add au tomated sortation system for small package handling
- Imple ment predictive analytics for demand-based staffing
- Consid er AS/RS system for highvelocity SKUs