Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:02:16 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 28

Average Utilization: 76.2% 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	83.9%	1,885	2,257	96.3%	79.2%	Improvemen t Needed
Distribution Dallas, TX	30.5%	2,506	1,573	99.0%	94.9%	Optimized
Center B Distribution Atlanta, GA Center C	89.5%	1,771	3,493	99.2%	64.7%	Improvemen t Needed
Distribution Los Center D Angeles, CA	76.2% A	2,712	1,814	99.3%	73.8%	Improvemen t Needed
Distribution Newark, NJ Center E	96.0%	1,353	2,170	97.4%	68.1%	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