Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:01:08 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 74

Average Utilization: 75.9% 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, Center A	L 72.9%	2,672	2,589	99.3%	69.1%	Improvemen t Needed
Distribution Dallas, TX	118.7%	1,555	3,252	95.1%	92.3%	Optimized
Center B Distribution Atlanta, G Center C	A 47.2%	1,511	2,550	97.2%	76.7%	Improvemen t Needed
Distribution Los Center D Angeles, 0	61.8% CA	2,579	3,894	96.8%	72.6%	Improvemen t Needed
Distribution Newark, N Center E	IJ 90.6%	1,837	1,868	97.9%	68.8%	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