Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:07:14 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5 Total Robots: 32

Average Utilization: 71.4% 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	68.3%	2,242	3,975	96.4%	72.1%	Improvemen t Needed
Distribution Dallas, TX Center B	70.4%	1,025	1,799	96.8%	79.3%	Improvemen t Needed
Distribution Atlanta, GA Center C	40.8%	2,645	3,054	97.5%	68.8%	Improvemen t Needed
Distribution Los Center D Angeles, CA	80.2% A	1,932	3,062	97.4%	64.7%	Improvemen t Needed
Distribution Newark, NJ Center E	77.2%	2,679	1,568	99.1%	72.0%	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