Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:01:40 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5 Total Robots: 33

Average Utilization: 71.5% 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 Center A	Chicago, IL	84.6%	1,627	1,675	97.3%	69.6%	Improvemen t Needed
Distribution Center B	Dallas, TX	67.7%	1,450	1,610	96.9%	73.2%	Improvemen t Needed
Distribution Center C	Atlanta, GA	46.6%	2,537	3,422	96.7%	78.0%	Improvemen t Needed
Distribution Center D	Los Angeles, CA	96.8% \	1,143	3,027	98.4%	67.1%	Improvemen t Needed
Distribution Center E	Newark, NJ	65.1%	2,055	2,177	97.7%	69.5%	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