Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:01:54 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5 Total Robots: 42

Average Utilization: 68.9% 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, IL Center A	73.1%	2,263	3,046	97.2%	75.6%	Improvemen t Needed
	Distribution Dallas, TX Center B	82.6%	2,028	3,300	99.2%	61.1%	Improvemen t Needed
	Distribution Atlanta, GA Center C	46.9%	2,786	3,543	97.6%	68.1%	Improvemen t Needed
	Distribution Los Center D Angeles, CA	63.4% A	2,129	1,581	95.0%	69.7%	Improvemen t Needed
	Distribution Newark, NJ Center E	108.1%	2,673	2,880	97.2%	69.9%	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