Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:05:52 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 33

Average Utilization: 76.8% 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		2,775	1,727	96.1%	81.4%	Optimized
	Center A Distribution Dallas, TX		1,177	2,834	96.2%	82.3%	Optimized
	Center B Distribution Atlanta, GA Center C	113.1%	1,217	2,183	99.2%	71.6%	Improvemen t Needed
	Distribution Los Center D Angeles, CA	54.0% \	2,733	2,885	99.5%	62.9%	Improvemen t Needed
	Distribution Newark, NJ Center E	53.2%	2,999	3,195	97.7%	85.8%	Optimized

Optimiz ation O pportun ities

Deploy 5
additional
AGVs in
Warehouse
3 to
increase
throughput
by 20%
• Imple
ment voice-

picking 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