Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:09:22 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5 Total Robots: 42

Average Utilization: 81.7% 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 Level	n Status
Distribution Chicago, IL Center A	72.5%	2,565	1,813	99.1%	74.4%	Improvemen t Needed
Distribution Dallas, TX	54.9%	2,675	2,409	98.3%	83.3%	Optimized
Center B Distribution Atlanta, GA Center C	88.7%	1,222	1,592	97.3%	75.9%	Improvemen t Needed
Distribution Los Center D Angeles, CA Distribution Newark, NJ Center E	34.9%	2,954	2,188	95.1%	83.3%	Optimized
	⁴ 69.7%	2,880	3,482	97.0%	91.7%	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