Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:04:24 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 47

Average Utilization: 80.8% 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 Level	n Status
Distribution Chicago, IL	63.7%	2,697	1,592	95.2%	90.4%	Optimized
Center A Distribution Dallas, TX Center B	80.4%	1,291	1,544	96.3%	70.9%	Improvemen t Needed
Distribution Atlanta, GA	35.1%	2,704	3,907	95.2%	85.9%	Optimized
Center C Distribution Los	74.9%	2,517	3,223	99.0%	93.3%	Optimized
Center E Angeles, CA Center E	⁴ 43.1%	2,068	1,554	96.7%	63.5%	Improvemen t Needed

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