Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:07:33 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5 Total Robots: 36

Average Utilization: 82.0% 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	Status
Distribution Chicago, IL		2,123	3,109	95.0%	81.9%	Optimized
Center A Distribution Dallas, TX Center B	44.4%	1,894	3,838	98.8%	70.5%	Improvemen t Needed
Distribution Atlanta, GA	61.4%	1,138	2,756	97.1%	93.2%	Optimized
Center C Distribution Los Center D Angeles, CA	46.2% \	1,137	2,463	96.3%	72.4%	Improvemen t Needed
Distribution Newark, NJ Center E	90.9%	1,260	2,516	95.0%	91.8%	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