Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller

Date: 8/3/2025, 8:07:10 AM Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 28

Average Utilization: 78.2% 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		2,481	3,486	98.6%	88.8%	Optimized
Center A Distribution Dallas, TX Center B	32.6%	1,816	2,468	97.4%	64.7%	Improvemen t Needed
Distribution Atlanta, GA Center C	77.4%	1,750	1,687	96.5%	70.2%	Improvemen t Needed
Distribution Los	93.5%	2,584	3,805	97.5%	82.7%	Optimized
Center D Angeles, CA Distribution Newark, NJ Center E	⁴ 54.3%	2,651	3,575	96.2%	84.7%	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